

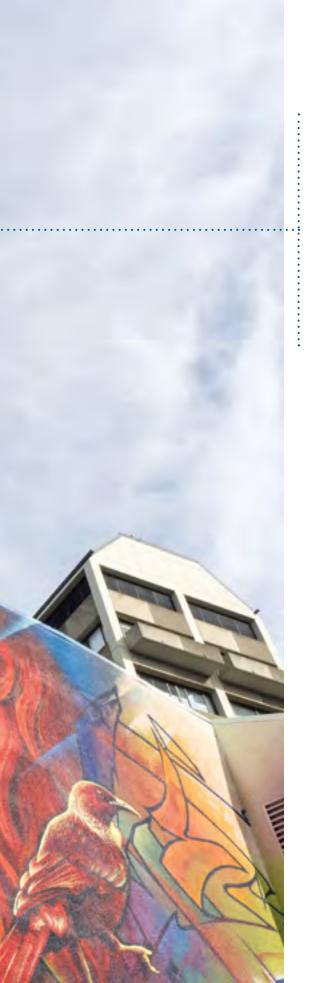
Iti rearea teitei kahikatea ka taea. Ko te reo rāhiri, ko te reo pōwhiri e karanga ana ki a koutou ngā rearea iti ka whai wāhi kei raro i te rūhā o te rākau mātauranga o Aotearoa, a ko te Whare Wānanga o Otāgo. Tēnā, karapinepine mai, whakarauika mai.

Ahakoa tō awhero, ahakoa tō wawata he wāhi hāneanea mōu, he ara whakamua mōu hei tutuki tēnā tāu e hiahia ai. Mēnā ka whai tohu koe ki te reo Māori, ki ngā āhuatanga Māori, ki te kete aronui, ki te ture, ki te pūtaiao, ki te hauora, ki te tauhokohoko rānei, ahakoa te kaupapa he wāhi mōu, he tohu mōu.

Ko te ringa āwhina ka toro atu ki a koutou, ko ngā pou taunaki ka whakaakoria, ka ārahia, ka tautokona koe ki te rere atu ki ngā karamatamata, ki ngā puhikaioreore o te rākau mātauranga nei.

Nau mai, haere mai, tauti mai!





It is said that although the bellbird is small it can reach the highest branches of the tallest tree. The voice of welcome from the University of Otago calls out to you, to take rest beneath its branches. As the first university in New Zealand, the University of Otago can be likened to the most senior branch of the tree of education.

We welcome you all.

Whatever your dreams or aspirations, they can be realised here. Whether you want to pursue the Māori language or other aspects of the Māori culture, humanities, law, science, medicine or business, there is a place for you here and a qualification to suit your specialty.

At the University of Otago we have the people to teach, guide and support you to fly to the treetops and beyond.

Welcome, welcome, welcome.

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## Welcome to the University of Otago



The University of Otago was founded in 1869 by early Scottish settlers who recognised the importance of universities. Otago is the oldest and finest university in New Zealand with a long history of excellence in teaching and research. We work in partnership with Ngāi Tahu, the tangata whenua of this place. We value the strong cultural contribution of both elements of our history; the bagpipes and the haka can be heard on our campus and at our graduation ceremonies.

Students at Otago are taught by academic staff who are dedicated to teaching and who are internationally recognised for their research. We are committed to educating the next generation of professionals across a wide range of disciplines, and we are also committed to nurturing the next generation of citizens in New Zealand and other parts of the globe. At Otago you will gain a world-class qualification, and you will also learn other important lessons along the way — lessons that will allow you to thrive in all aspects of your adult life.

In addition, you will make friends whom you will keep for a lifetime.

In order to make the best of your brief time with us, I strongly encourage you to be the best student you can be. I also encourage you to take advantage of the wide range of extracurricular and co-curricular activities that we have on offer. The University of Otago is located in one of the most beautiful places on the planet – please take time out to discover the beaches, the hills and the native flora and fauna that are right on our doorstep. Most importantly, I challenge you to dream.

I warmly welcome you to this exciting new chapter of your life.

PROFESSOR HARLENE HAYNE Vice-Chancellor

April 2017

"Human knowledge is important – it is the greatest achievement of our species. It is what more than anything else sets us apart from other creatures. It is what makes us the most important, the most powerful, and yes, the most dangerous critter that there is. It is because human knowledge is so important that the universities, charged with transmitting and extending that knowledge, are also important."

PROFESSOR ALAN MUSGRAVE Department of Philosophy, University of Otago



20,000 students, including 2,500 international students from 100 countries and 4,500 postgraduate students.



Otago tops the TEC educational performance indicators for retention of students and progression to higher study.



Ranked 169th in the 2016/17 QS World University Rankings ... and in the top 100 in 13 subject areas.



Otago holds more teaching awards than any other New Zealand university, including four Supreme Award winners in successive years (2012-2015).



Otago scores the highest possible international quality rating for excellence and quality.



94% of our graduates go into work or on to further study.



Otago offers more than 190 undergraduate and postgraduate programmes.



Our 15 residential colleges located on or near campus accommodate around 3,500 students.



We offer more than 150 student clubs and societies to choose from.



85% of our students come from outside Dunedin.



Otago has produced 62 Rhodes Scholars since 1904.



Recognised as one of the 15 most beautiful campuses in the world (*Huffington Post* 2013).



Academic excellence and an outstanding student experience.

Welcome to the University of Otago – New Zealand's first university and the first choice for more than 20,000 students.

After almost 150 years, we're still leading the way when it comes to world-class teaching and a legendary student lifestyle – the two core elements that set the University of Otago apart, and the reason students from across the country and around the world choose us for their tertiary education.

An Otago degree can give you the momentum to get where you want to go in life. And it's not just academic achievement that you'll take with you. The experiences and friendships forged at Otago can last a lifetime.



Our 20,000 students make up one fifth of Dunedin's population, creating an energy and atmosphere that you'll only find at Otago.

The town and the University campus developed together, so Dunedin is one of just a handful of places worldwide where education is the main activity of the city.

Our campus and residential colleges are located in the heart of town, and all of Dunedin's cafés, music venues, designer boutiques and stores, museums and galleries are never more than a short walk away.

When it comes to sport, Otago takes on the best in the world. The University's facilities are state of the art and New Zealand's only covered sports field, Forsyth Barr Stadium, is right on your doorstep for top-level rugby.

But that's just the beginning. Dunedin is a small city between the mountains, the harbour and the sea – that means there's heaps to do and it's easy to get to. No other city in the country has the same range, quality and accessibility of leisure activities. Ride the best waves in the world, take on mighty mountain biking tracks, paddle-board, kayak or sail on the harbour, or head to Central Otago for a weekend on New Zealand's top ski fields.

Imagine changing out of your wetsuit then walking to the city centre for lunch, or snowboarding all day and getting home in time to catch your favourite band. It's just part of life in Dunedin.

# Make no mistake – Dunedin is a student city.













Your first year at university is a major milestone in your life – the University of Otago will make sure it's the best it can be.

Most of our first-year students choose to live in one of our 14 residential colleges for undergraduates, which offer support and guidance, good food and facilities, and are great places to make new friends and share new experiences.

Other students prefer to go flatting, boarding or to live at home. Whichever you choose, the support is there to help you get the very best out of your time at Otago.

A first-class education requires world-class facilities and Otago is known for its state-of-the-art lecture theatres, research labs and libraries. There's also unlimited wi-fi across campus and our computer labs are open 24/7.

For those who like to play for fun, the University's Clubs and Societies programme offers over 100 short courses and activities, from arts, crafts and dancing to cooking, languages and music.

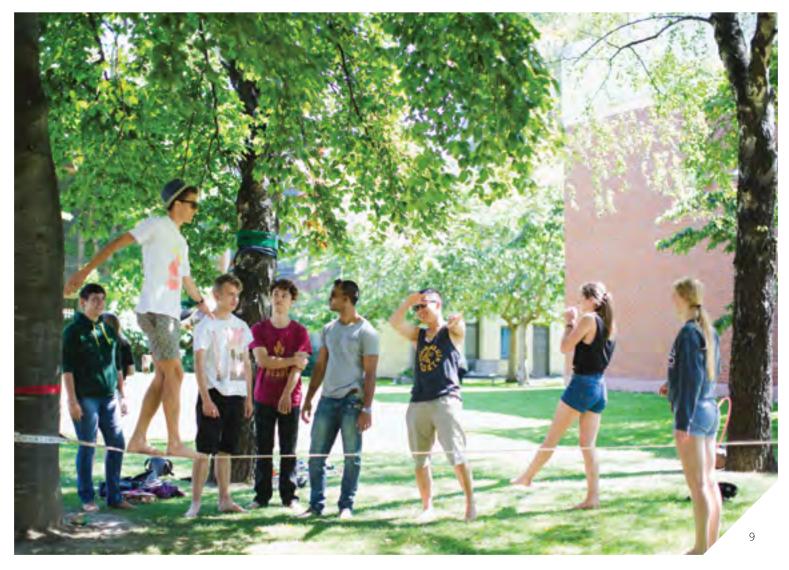
If you're serious about sport, then Otago is the best place to be. What other university hosts international cricket minutes from campus, and international rugby right next door?

Unipol Recreation Centre is a superb gym facility that offers everything you need free of charge, including cardio and weights, sports halls, group fitness classes, social sport and outdoor adventures – whatever you need to get your fix of the outdoors.

You won't regret choosing the all-round experience that Only Otago can offer.









## **Student services**

Our top-quality education and facilities are matched by our range of student support services, dedicated to helping you get the very best out of your time at Otago.

#### **Academic Orientation**

Run the week before the start of the first semester, Academic Orientation includes a wide variety of academic events to assist you in making the step from secondary school to settling into university life.

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otago.ac.nz/academic-orientation

#### **Campus Watch**

The Campus Watch teams are out and about 24/7, offering assistance and advice around campus and North Dunedin whenever it is required. Team members are easily recognised by their distinctive blue and gold uniforms.

The University has a Code of Student Conduct, a set of common-sense rules that prohibit behaviour that is likely to endanger safety.

The University relies on Campus Watch to help maintain a safe and healthy campus and to ensure that the provisions of the Code are observed.

The Code of Student Conduct is available online:

otago.ac.nz/proctor/codeofconduct Tel 03 479 5001 Emergency 03 479 5000 Freephone 0800 479 5000 otago.ac.nz/proctor/campuswatch

#### Career Development Centre

The Career Development Centre, located in the north-east corner of the Information Services Building (Central Library), beside the Burns Building, is here to help you make the best possible use of your time at University and beyond.

Our online system, OtagoCareerHub, keeps you up to date with current career events and news, lists current internships and graduate vacancies, and has targeted job-search information for students. We run interactive career workshops, coordinate employer presentations and

career fairs, and have a range of career information for students to browse, as well as having career advisers available for oneto-one discussions.

At the Career Development Centre we're not just into short-term job-hunting, we're into long-term career management and planning, helping you to get to where you want to be.

Tel 03 479 8244 Email careers@otago.ac.nz otago.ac.nz/careers

#### **Chaplains**

The University chaplaincy team is available to offer pastoral care and spiritual support to anyone who wants to talk in confidence, whatever their beliefs. The chaplaincy offices (The Upper Room) can be found on the eastern end of the mezzanine floor in the University Union building.

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otago.ac.nz/chaplain

#### Childcare on campus

The Otago University Childcare Association provides excellent early childhood education in high-standard purpose-built facilities. The OUCA operates four childcare centres, including a bilingual centre, for children from birth to five years.

Places are available across all age groups and all centres and a wait register form is required. Twenty hours' ECE is available for all three and four year olds, reducing the cost for these children. WINZ subsidies provide financial assistance also.

otago.ac.nz/childcare

#### **Computer services**

Otago provides a range of IT services to students: 24-hour wireless study spaces with printers and computers, student webmail and online Office 365, and a student desktop that's accessible anywhere.

Our friendly Student IT support team provide help and advice about any IT questions you might have, in-person and online, including a website with everything you need to know about the IT services available to students and how to use them.

Student IT offers free, short training sessions tailored to common student questions, while IT Training provides subsidised longer courses on all the software you'll require for your courses.

Student IT support: studentit@otago.ac.nz Tel 03 479 5170 otago.ac.nz/studentit facebook.com/uostudentit Visit us in the Central Library, 7 days a week during semester.

#### Course advice

Whether you know what you want to take for your course of study or not, course advice is an opportunity to discuss your choices with the experts.

They can look at not just your 2018 course of study, but ensure that it is setting you up so you can complete your qualification in a timely manner. They can make sure your study fits with your career aspirations and will help to get you where you want to go.

It's also an opportunity to find out about other services that are available at the University to allow you to finish your qualification with the skills, knowledge and confidence to tackle life's challenges.

Course advice is available throughout the year, and at any time during your studies.

Talk to one of our Liaison team or, once you are on campus, book an appointment with a member of the University Course Advice Service.

otago.ac.nz/courseadvice

#### Disability Information and Support Office

Disability Information and Support provides learning support, advice, advocacy and information to students with disabilities, impairments, medical conditions or injuries that may impact on their study.

The support we provide is varied and may include: access to specialised equipment, quiet study rooms, note-taking, tutoring, reformatting of course materials and alternative examination arrangements. Our Student Advisers are available to discuss each student's requirements and work collaboratively to put together a support plan.

Tel 0800 80 80 98 or 03 479 8235 Fax 03 479 5873 Email disabilities@otago.ac.nz otago.ac.nz/disabilities

#### Libraries

The University of Otago Libraries offer an outstanding range of information services, quality resources, wi-fi and warm comfortable facilities suitable for individual or group learning. Whether you are studying on or off campus, enjoy access to a wide variety of print, electronic and audiovisual resources. Make the most of readily available expert assistance with sourcing and evaluating library resources and developing your search skills from friendly, knowledgeable staff.

There are a number of service points across campus, including the Central Library (Commerce and Humanities), the Robertson Library (Education), the Sir Robert Stout Law Library, Health Sciences and Science Libraries and Hocken Collections (New Zealand and Pacific heritage material). The Central Library is located in the University's multi-award winning Information Services Building (ISB).

Email ask.library@otago.ac.nz otago.ac.nz/library

#### Orientation week

Every year kicks off with Orientation, the welcome week that will introduce you to student life. This is your chance to find your way around campus and enjoy the full schedule of gigs, events and other entertainment organised by the University and the OUSA (Otago University Students' Association).

#### Student Health Services

Student Health is centrally located on campus in a purpose-built facility. We have approximately 50 staff, comprising nurses, general practitioners, counsellors, psychiatrists and administrative staff.

We endeavour to provide the best health care possible in a manner that is competent, compassionate, confidential, timely and in an atmosphere of mutual responsibility and respect.

We provide daily urgent and routine appointments. If patients need to be seen in our urgent daily clinic they will always be triaged (phone call or face to face) by a nurse before being booked for an appointment with a health professional. Consultation fees do apply (details are available on our website) and charges are reduced with a Community Services Card (CSC).

The Dunedin Urgent Doctors and Accident Centre is available for after-hours medical care. Higher consultation fees apply for after-hours services.

The Emergency Psychiatric Service at the Dunedin Public Hospital provides urgent mental health care 24 hours a day.

More information on the services provided and the fees charged are available on the Student Health Services website.

Corner of Albany / Walsh Street Tel 03 479 8212 or free phone 0800 479 821 otago.ac.nz/studenthealth

#### **Student Learning Development**

Student Learning Development offers a free service for enrolled undergraduates. Assistance includes:

- · interactive workshops
- individual consultations with learning advisers
- peer learning/support programmes including PASS (peer assisted study sessions) and peer writing support
- a Peer Leadership Programme offering students opportunities to develop leadership skills through a range of workshops and activities
- a Peer Support Programme for first-year local students not living in residential colleges
- · online study resources.

Tel 03 479 5786 slc.otago.ac.nz

#### **University Information Centre**

The University Information Centre in the Information Services Building should be your starting point for enquiries about:

- your course of study (including changes to your papers)
- · enrolment
- graduation
- examinations
- any other administrative matters.

There are also self-service kiosks located in the Information Services Building, St David Lecture Theatre Complex, Commerce Building and at University College.

University Information Centre Information Services Building Dunedin Campus
Tel 0800 80 80 98 (within New Zealand) or 64 3 479 7000
Email university@otago.ac.nz
Web and Online Chat ask.otago.ac.nz



Tēnā koutou, nau mai, haere mai, tauti mai ki te Te Huka Mātauraka – Māori Centre mō te tau 2018.

Māori students will find a friendly and supportive "Whānau on Campus" atmosphere at Otago.

During Orientation and kā hui mō ka Tauira hou you are introduced to the Māori student communities. You'll also get a warm reception from the many student support networks at Otago. The Māori Centre encourages Māori students to participate and succeed at Otago, and offers support for academic, cultural and social needs from pre-enrolment through to graduation.

The Centre creates opportunities for Māori students at Otago to meet in an informal and relaxed atmosphere and operates from a kaupapa Māori base to provide services such as:

#### Tūraka Hou / Māori orientation

The first event is the pōwhiri at the local Papatipu Marae to welcome first-year Māori students to Otago, and to introduce students to the Centre staff, Te Roopū Māori, Divisional Kaiārahi and Kaiāwhina. Several other events follow during Orientation week.

### Māori Academic Orientation Programme for first-year local Māori students

The Centre provides the Māori Academic Orientation Programme for first-year local Dunedin Māori students that will prepare you for university study. The programme will assist students to develop essential academic skills in their first year.

## Ka Karahipi – scholarships and grant information

The University of Otago, Te Tapuae o Rehua, Māori Education Trust, Health Funding Authority, Iwi Trust Boards/ Rūnanga and other agencies make scholarships and grants available to Māori students. For general scholarships see page 53.

Closing dates for other scholarship applications can be as early as September 2017, so contact the Māori Centre early for information.

#### Liaison, study advice and mentoring

The staff of the Centre will advise you about your academic studies, welfare, finances, counselling services and iwi networks.

The Centre provides a mentoring programme for first-year students to assist with your studies, which includes regular events and activities throughout the year.

#### **Tutorials and seminars**

The Centre provides and arranges a wide range of supplementary tutorials, which are organised around your timetable, across all disciplines and subjects by request. Exam preparation and seminar rooms are available for casual study on request.

#### **Counselling and advocacy**

The Centre provides counselling and advocacy with study issues, well-being, health and welfare matters, information and assistance regarding special consideration.

#### Māori pre-graduation ceremonies

The Centre hosts six pre-graduation ceremonies for Māori graduands and their whānau each year the day before the main graduation ceremony.

#### Māori students' groups

Te Roopū Māori (The Māori Students' Association) is the parent group of the student groups on campus that are in the Dunedin School of Medicine, Dentistry, Pharmacy, Physiotherapy, the Law Faculty, Division of Humanities, Division of Commerce, Division of Sciences and School of Physical Education. There is also a Māori Postgraduate Support "Mai Ki Otago".

Pearl Matahiki, Tumuaki/Manager Tel 03 479 5762 Email pearl.matahiki@otago.ac.nz otago.ac.nz/maoricentre



Photo: Otago Daily Times

Talofa lava and welcome to our students from the Pacific – this is your Centre!

The Pacific Islands Centre is here to nurture you so that you can flourish academically, mentally and spiritually, and find your place in the world.

Our role is to provide academic, pastoral and cultural support for all Pacific students enrolled at Otago, and we work collaboratively with the academic divisions and the Pacific community to make your time at Otago as memorable and successful as possible. So whether you relate strongly with your Pacific culture or want to learn more about your Pacific heritage, the Pacific Islands Centre is the place to be.

The Centre is open Monday to Friday, 8.30am – 5pm, and provides:

- Supplementary tutorials and an academic mentoring programme
- Friendly and experienced staff to help with pastoral care and advice on matters such as accommodation, scholarships, legal and immigration issues, travel, places to worship, university and courserelated information, study skills and support services
- Tutorial rooms and a warm place to study
- · Student computers and wi-fi
- Kitchen facilities (for tea, coffee, milo and heating up your lunch)
- Links to the Pacific community in Dunedin
- Cultural advice to University staff and community
- Support for Pacific Students' Associations
- A postgraduate reference group to support postgraduate students
- and many events to help you meet new people and better focus on your studies.

All our services are free, and all matters are handled in the strictest confidence and with respect for your privacy.

Come join your family away from home – we're looking forward to meeting you!

Tofilau Nina Kirifi-Alai, Manager 1 Leithbank (Corner of Leithbank and Clyde Street – opposite the Commerce Building) Tel 03 479 8278 Email pacific@otago.ac.nz otago.ac.nz/pacific



The Locals programme gets you connected with other first-year students living in the local community.

So if you are living at home, flatting or boarding in your first year at university join Locals for access to orientation week events and to academic support, social, sporting and community-based opportunities throughout the year.

Locals has developed from small beginnings into one of the largest student communities on campus and continues to grow with support from staff and students who see local students as an important part of this university.

Locals is student-focused and studentsupported. A team of students who have been in Locals as first-years stay on to become leaders and, in turn, support the next group of first-year Locals.

locals.otago.ac.nz

Dr Stephen Scott Tel 021 276 2674 Email locals@otago.ac.nz facebook.com/OtagoLocals





"Joining Locals was one of the best choices I made in my first year. I was so worried I wasn't going to find any friends or fit in at uni

school working for a few years.

But the Locals support network was perfect and it was just really cool being able to hang out every day at HQ with all the mates I made.

I had literally nothing to worry about."

#### Darriane Webb

Studying for a Bachelor of Science (Zoology)



At UniCrew Volunteers we support students to lead social projects to address causes that they care about, and we help connect students with opportunities to make positive changes in our community.

We can help you find meaningful roles that work in well with your life as a student no matter how much time you have to spare.

One of our recent projects saw over 70 students head out to the Dunedin suburb of Brockville for a volunteering day dubbed "The Brock Party", where they transformed the backyards of former refugee families who have settled in the community.

Through volunteering you will gain valuable learning experiences as well as a chance to apply skills and knowledge you already have. Student volunteers often have the employability edge as they can demonstrate to employers the additional skills and experiences gained through volunteering.

otago.ac.nz/volunteer

Tel 03 479 8631 Email volunteer@otago.ac.nz facebook.com/unicrewotago





"The Brock
Party gave me
an amazing
opportunity to
connect with the
community. We
laughed, talked and
sweated while we
worked and then we all

came together at the end of a

hard day to eat and party. The experience really confirmed my belief that the measure of a person's wealth is not what they can get, but what they can give. It's about 'tuia te here tangata' or weaving together the strands of humanity."

#### Tyrin Tutaki

Tainui, Waikato, Ngāti Maniapoto Studying for a Bachelor of Arts (Māori Studies)



Take the opportunity to study for one or two semesters overseas at one of Otago's partner universities, and credit the work you complete while on exchange.

Otago students have the opportunity to travel the world, experience new cultures and gain skills to enhance their CV, all while earning credits towards their Otago degree. Otago has exchange agreements with over 100 prestigious universities throughout Europe, the Americas and Asia-Pacific.

Students pay Otago tuition fees and continue to receive StudyLink loans and allowances. There are also awards and grants available to help fund the exchange. Applicants must normally have a B grade average or better to qualify.

Full details on the programme and a current list of exchange partners is available online.

otago.ac.nz/student-exchange

Email exchange@otago.ac.nz facebook.com/OtagoGlobalStudentExchange



"Words cannot describe the six months I spent abroad. Being able to study at a great university and seeing a massive portion of the United States was a real privilege

– it was the trip of a lifetime.

Don't get to the end of your time at university and regret not experiencing an exchange! Just do it. Commit. All in. You'll learn so much about the world, and yourself."

#### Kendall Malcolm

Studying for a Bachelor of Physical Education (Exercise Prescription and Management, and Exercise and Sport Science)
Completed an exchange at the University of Texas at Austin in 2016.



Unipol Recreation Services and the OUSA Clubs and Societies team provide a comprehensive programme to ensure students maintain a healthy, balanced and fun lifestyle while studying at Otago.

With many recreational opportunities on and off campus including courses, trips, group fitness classes, social sport, sports clubs and societies – there really is something for everyone!

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#### **Unipol Recreation Services**

Entry into Unipol is free with a current student ID card. This fantastic facility includes weight training and cardio rooms, and team sports areas where students and their friends can participate in casual sports such as basketball, table tennis and more. A range of equipment can also be hired.

#### Club sport

If you're interested in participating in sports at a local or national level there are more than 40 clubs catering for all abilities, from beginner to elite.

OUSA's Aquatic Centre is home to the Otago University Rowing Club, which prides itself on providing a supportive and inclusive environment for first-time and accomplished rowers alike, and has established a tradition of producing world-class rowers since its formation in the late 1920s.

Every year OUSA presents the University of Otago Blues and Golds Awards, which recognise sporting, artistic and cultural achievement, plus contributions in supporting and administrative roles. The sporting Blues date back over 100 years (1908) while the Golds were established in 2002.

#### **OUSA Clubs and Societies**

OUSA operates the Clubs and Societies Centre – the base for over 150 clubs and societies. Most of its facilities are free or inexpensive and the centre also provides a sauna, dance and exercise spaces, a commercial kitchen, pianos and meeting/ study rooms.

The centre runs an inexpensive and extensive recreational programme, including activities like yoga, tai chi, painting and coffee-making, and it is also the base for over 75 societies covering different cultural, sporting, political and religious interests.

For all your campus recreational needs pick up a copy of Healthy Campus Recreation magazine from Unipol or the OUSA Clubs and Societies Centre.

otago.ac.nz/recreation ousa.org.nz







OUSA is an independent organisation that represents students' interests within the University, in the media and with local and national government.

We provide a wide range of services, events and support, most of it free and all of it designed with you in mind. OUSA membership is free to University of Otago students. Catch up with us on Facebook or Instagram to keep an eye on what is happening on campus.

We're YOUR association, independent of the University and helping make the Otago campus community the best place to study and live. For us, it's all about YOU!

We are always looking for volunteers, ideas and feedback so pop in and see us in the OUSA Main Office.

ousa.org.nz facebook.com/ OtagoUniversityStudentsAssociation Instagram: ousanz Snapchat: snapousa Hello all prospective students! I'm Hugh Baird, president of the Otago University Students' Association (OUSA).

At OUSA, our job is to ensure that the Otago student experience is the best in the country. We offer a range of services, from advocacy and lobbying to clubs and



societies. And we organise legendary Otago events like Orientation, the Capping Show and the Hyde Street party.

If you're interested in joining one of the many clubs on campus or perhaps even trying your hand at underwater hockey, then our recreation team has you covered. Maybe you're keen to brush up on your cooking skills? OUSA runs a multitude of classes to have you impressing that first date in no time.

I wish you luck with your upcoming decisions, and encourage you to choose Otago. It's a choice you won't regret!

Hugh Baird
OUSA President
president@ousa.org.nz



#### **OUSA Main Office**

For directions and help, lost property, DCC rubbish bags, services information, tickets to gigs, access to the OUSA Executive, fair-trade goodies, locker hire, to answer your questions and much more.

640 Cumberland Street Tel 03 479 5332 Email ousa@ousa.org.nz

#### **OUSA Clubs and Societies**

The OUSA Clubs and Societies Centre is a vibrant and popular base for over 150 clubs and societies, a wide range of facilities, courses and lots more (see page 19 for more information).

84 Albany Street Tel 03 479 5960 Email clubsandsocieties@ousa.org.nz ousa.org.nz/recreation/

#### **OUSA Student Support**

The OUSA Student Support Centre offers a friendly and confidential advocacy service – in simple terms, we're here to help you out when the Uni, your flat or even just your budgeting skills are not quite working out for you. Some of the common issues we assist with are academic, tenancy,

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employment and ethical behaviour. We have extensive knowledge of student issues, university processes and appropriate courses of action. Other services of the OUSA Student Support Centre include running the Class Rep system, Are You OK? Team, flat mediations, a noquestions-asked food bank and Queer support (including queer peer support, information and a resource library).

It's all free, so if you need a bit of help, a mediator or some friendly advice we can help you out, so pop on in.

5 Ethel Benjamin Place Tel 03 479 5448 Email help@ousa.org.nz ousa.org.nz

#### Student Job Search

Student Job Search Otago (SJS) offers a year-round employment service exclusively for tertiary students. All jobs can be seen 24/7 at sjs.org.nz

Tel 0800 757 562

#### **University Book Shop**

OUSA owns UBS, where you can get a 10 per cent discount on all books. Check out the new location on campus in the archway

for all your textbook and GO card needs, and keep an eye out for the end-of-year textbook buy-back deal. Textbook lists and other information are available online.

unibooks.co.nz

#### Radio One 91FM

OUSA owns Dunedin's finest independent radio station. Get yourself a free ONE card for prizes, monthly party hook ups, discounts and free entry to Onefest gigs. Volunteer and you can be part of student radio and get yourself some radio experience.

Stream online or set your dial to 91FM.

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r1.co.nz

#### Critic

Critic is OUSA's independent student magazine, out every Monday during semester. It's got all the on-campus gossip, plus it's a good source of alternative news and general mayhem. They're always looking for volunteers so get in touch and show them your skills, and be a part of an award-winning publication.

critic.co.nz



## **Accommodation**

Leaving home is a big step, but when you come to the University of Otago, there are plenty of choices to make that transition easier, safe and fun!

The Student Accommodation Centre has accommodation advisers available to talk to you Monday to Friday 8.30am – 5.00pm, or you can talk to a schools' liaison officer.



Otago is famous for its residential college communities. We have 15 diverse colleges, catering mostly for first-year students.

All of the residential colleges are within walking distance of the University and offer quality, safe and supervised living.

The unique collegiate life at Otago is an important part of the experience for many students leaving home for the first time — the community atmosphere, the support, and the opportunity to discover lifelong friendships all help to make that first year away from home not just easier, but also memorable.

All of the colleges are fully catered, warm, student-focused and secure.

Professional, experienced college leaders and staff take a real interest in the well-being of their residents, and they are supported by senior students who mentor and guide new students through their first year of university. The colleges all provide regular tutorials and study spaces, and work hard to develop their residents as scholars and good community members.

College life includes a full and exciting calendar of cultural and sporting events throughout the year, including inter-college competitions for summer and winter sports, and cultural activities.

The colleges have a range of recreational facilities, ranging from games and fitness areas to gyms or cardio rooms.

#### Applying for residential colleges

You can apply online from 1 August each year. When completing your application, take the time to complete each section fully as any inaccuracies may cause delays in sending it on to your first choice of college.

You will receive an instant confirmation from the Student Accommodation Centre on receipt of your application.

To be considered in the first round of offers for a place next year, your application and confidential reference form should be received at the Student Accommodation Centre before 15 September. Applications received after this date will still be considered as places become available.

During October, you will either be offered a place in one of the colleges, or you will be advised that your application is on a waiting list. This list is reviewed continually between October and when university starts in February.

For more information contact the staff at the Student Accommodation Centre or one of our schools' liaison officers.

NB: The accommodation application is not your registration for study, which you must also complete to enrol at the University of Otago (see page 50 for enrolment information).









## Colleges at a glance

Otago offers a unique range of world-class collegiate communities. Read about each of them on the following pages.

NB: The fees provided for the colleges are indicative, based on 2017 prices. Please check our website for 2018 fees.

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	Aquinas	Arana	Carrington	City	Cumberland	Hayward	Knox
Walk to uni (mins)	15 (free hourly shuttle)	3	6	5	4	3	12 (free evening shuttle)
Number of beds	152	404	243	210	327	162	262
Tutorials	1	✓	✓	✓	✓	✓	✓
Music facilities	1	✓	✓	✓	✓	✓	✓
Student activities (sporting)	1	✓	✓	✓	✓	✓	✓
Student activities (cultural)	1	✓	✓	✓	✓	✓	<b>✓</b>
Inter-college activities	1	✓	/	✓	✓	✓	✓
Fully catered	1	✓	/	✓	✓	✓	✓
Special meals	✓	✓	<b>√</b>	✓	✓	✓	✓
Halal meals	✓	Х	Х	✓	✓	✓	X
Gym (*or close to Unipol)	✓ (full indoor court)	✓	<b>√</b> (fu	✓ ull outdoor cou	<b>X</b> *	1	✓
Laundry (included in fees)	✓	✓	✓	✓	✓	✓	✓
Parking (*costs apply)	√* 25 parks	Х	√* 2 parks	√* 28 parks	√* 7 parks	✓* 6 parks	√ 70 free parks
Linen	weekly	weekly	weekly	weekly	weekly	weekly	weekly
Bicycle storage	1	✓	✓	✓	✓	✓	✓
Disabled facilities	×	✓	Х	✓	✓	✓	✓
Recreational facilities (e.g. Sky, DVD, pool table)	1	1	1	✓	<b>√</b>	✓	<b>✓</b>
Summer accommodation	1	✓	✓	X	✓	✓	X
Single sex areas	<b>✓</b>	Х	✓	✓	✓	✓	✓
Undergraduate/postgradua	ite U/P	U/P	U	U/P	U	U	U/P
Study rooms	✓	✓	✓	✓	✓	✓	✓

St	: Margaret's	Salmond	Selwyn	Studholme	Te Rangi Hiroa	Toroa	Unicol
Walk to uni (mins)	O (fr	12 ee evening shuttle)	0	3	5	3	0
Number of beds	227	260	188	187	125	152	507
Tutorials	✓	✓	✓	✓	✓	✓	✓
Music facilities	1	✓	✓	✓	✓	✓	✓
Student activities (sporting	g) 🗸	✓	✓	✓	✓	1	✓
Student activities (cultural)	<b>/</b>	✓	✓	✓	✓	1	✓
Inter-college activities	✓	✓	✓	1	/	1	✓
Fully catered	✓	✓	✓	<b>✓</b>	✓	✓	✓
Special meals	some	✓	✓	✓	✓	✓	✓
Halal meals	Х	✓	✓	Х	✓	✓	✓
Gym (*or close to unipol)	<b>X</b> *	✓	✓	✓	✓	Х	✓
Laundry (included in fees)	✓	✓	✓	✓	✓	✓	✓
Parking (*costs apply)	<b>√</b> * 5 parks	✓ 50 free parks	<b>√</b> * 5 parks	×	<b>√</b> * 6 parks	✓* 9 parks	<b>√</b> * 45 parks
Linen	weekly	weekly	weekly	weekly	weekly	weekly	weekly
Bicycle storage	✓	✓	✓	✓	✓	✓	✓
Disabled facilities	✓	✓	✓	X	✓	X	✓
Recreational facilities (e.g. Sky, DVD, pool table)	✓	✓	1	✓	✓	✓	✓
Summer accommodation	✓	X	✓	1	✓	✓	✓
Single sex areas	X	✓	X	<b>✓</b>	✓	✓	✓
Undergraduate/postgradu	ate U	U/P	U	U	U	U/P	U
Study rooms	✓	✓	✓	✓	✓	✓	✓







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**Tutorials** 



\$14,060

It's testament to the unique community spirit that exists here at Aquinas that we clocked up 400 hours of volunteer work before the first semester had officially begun – with students coming together to help out the community and forge new friendships.

You'll connect with your fellow residents the moment you step in the door – joining our inclusive, diverse college whānau. We offer a full social, cultural and sports calendar to ensure you enjoy a balanced lifestyle, combining study, community and fun as you make your transition from teenage life to independence.

Featuring a spacious, newly-renovated environment with stunning views over the city, a gym, indoor sports court, outdoor space and personalised academic support from dedicated staff, Aquinas is located just a 15-minute walk from campus, or you can use our free shuttle service.

CONTACT:
Luke McClelland
Aquinas College | 74 Gladstone Road
Dunedin 9059
Tel 03 479 5560 | Email aquinas@otago.ac.nz



otago.ac.nz/aquinas







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**Tutorials** 



\$14,060

Open the front door to Arana College and step inside a collegial incubator where your success is measured not only in academic achievement but also by your engagement with your community.

Our diverse learning environment allows you to thrive. Support your team while navigating the bush together, volunteer for a local community group, and share new ideas with fellow residents while experiencing university life.

Our humble beginnings – established in 1943 to house returning soldiers – have created an unpretentious College that holds true to its core values of care, togetherness and strength. Sure, sometimes we dress up and have fancy dinners, but we remain thoroughly relevant to today's world. Help 'wield the paddles together' and be part of a new generation of leaders, thinkers and citizens who will help shape our future.

CONTACT:

Jamie Gilbertson
Arana College | 110 Clyde Street
Dunedin 9016
Tel 03 479 5508 or 479 5509 | Email jamie.gilbertson@otago.ac.nz



otago.ac.nz/arana







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**Tutorials** 



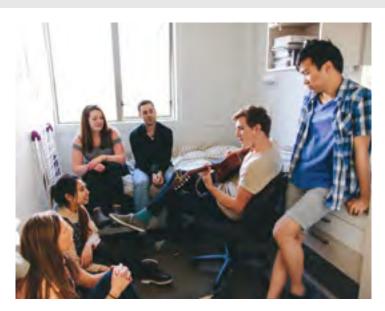
\$14,060

Escape the stress of a busy university campus and seek refuge in a tranquil college environment designed to meet your learning and social needs.

Within our historic site, you'll find buildings steeped in tradition, while fully equipped with technology, tutorial rooms, music rooms (with pianos) and social spaces where you can hang out with friends. Our character villas allow you to experience a taste of shared living with the benefits of college life, or step outside and take a break from your study and listen to birds singing from the trees that surround our college.

From around the world our students come with a common goal – to achieve excellence in education while engaging with the world we live in through the core values of respect, trust and a strong sense of collegiality.

CONTACT:
Robyn Madden
Carrington College | 57 Heriot Row
Dunedin 9016
Tel 03 479 5533 | Email robyn.madden@otago.ac.nz



otago.ac.nz/carrington







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**Tutorials** 



\$14,060

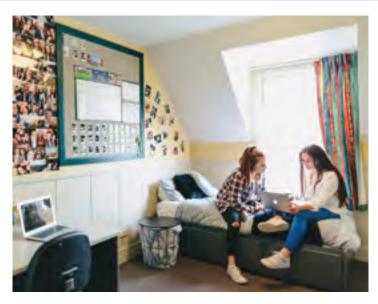
Inside City College's unique apartment living, you'll experience a world of diversity. With students studying a range of courses – from health sciences to psychology and business – City College allows students to thrive.

Artworks from alumni cover the walls of our custom-built modern learning environment, which also includes the Attic common room, tutorial rooms, a library and modular study spaces. As the inaugural winner of the Intercollege Cultural Competition, we take great pride in all of our students' talents.

Shared living offers you a perfect stepping-stone into your first year away from home with all the benefits of college life – from meals to structured academic support. Learn, network and engage with others during an immensely fun and memorable first year of tertiary education.

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CONTACT:
Andy Walne
City College | 911 Cumberland Street
Dunedin 9059
Tel 03 479 5590 | Email andy.walne@otago.ac.nz



citycollege.co.nz







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**Tutorials** 



\$14,060

Open your mind to new ideas and join a vibrant academically-focused college community where you will learn, discover and grow as a student and individual. Our motto – 'Fortune favours the bold' – embodies the culture and spirit of Cumberland, where we hope you'll challenge yourself to think differently, get involved and 'have a go'.

Cumberland is your home away from home – with a unique, friendly character that you feel the moment you walk through the door. We offer a variety of learning and social facilities, including live-in student Residential Assistants to help you settle in, a comprehensive academic support system, study spaces, an extensive sports and cultural programme, a wide range of volunteering opportunities, and the only college fully-lit astro-turf sports court.

CONTACT:
Nick Bates
Cumberland College | 250 Castle Street
Dunedin 9059
Tel 03 479 5574 | Email cumberland@otago.ac.nz



cumberland.ac.nz







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**Tutorials** 



\$14,060

No matter where you come from, what you study or what you're into, when you step into Hayward College you become a lifetime member of our family. Hayward is a nurturing place that embraces difference and celebrates individuality so that new students can grow and thrive.

We support and encourage academic achievement, and our priority is ensuring a balance of serious study and good times. Through our community, social and sporting events – from colour wars to speed meet-and-greets, 'Hayward Night Live', themed dinners and volunteer work – you'll feel part of something special, and form lasting friendships. We're proud of our motto – 'community and integrity' – and now offer an annual prize for each of the top two students who best demonstrate these Hayward attributes.

CONTACT:
Pauline Donovan
Hayward College | 110 Frederick Street
Dunedin 9054
Tel 03 479 5520 | Email hayward.college@otago.ac.nz



otago.ac.nz/hayward







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**Tutorials** 

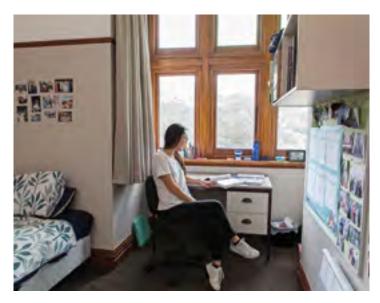


\$14,326

One of the country's oldest colleges, Knox stands as an exemplar of collegial life. Whether it's dining in the Great Hall, performing in the Concert on the Stairwell, enjoying the Garden Party, attending the Larnach Castle Ball, or competing against Selwyn College for the Cameron Shield and Nevill Cup, everything we do has a sense of occasion and is an expression of our strong communal life.

But this is not a stuffy affair. We bring our heritage into the twenty-first century, making it relevant for contemporary 'Knoxies', and ensuring we meet all your educational and social needs. Our impressive facilities include a full library, chapel with college choir, tutorial rooms, music rooms with four pianos, a shared tennis court, gym, common room and a variety of accommodation options.

CONTACT:
Dr Graham Redding
Knox College | 3 Arden Street
Dunedin 9010
Tel 03 479 0788 | Email master@knoxcollege.ac.nz



knoxcollege.ac.nz







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**Tutorials** 



\$15,390

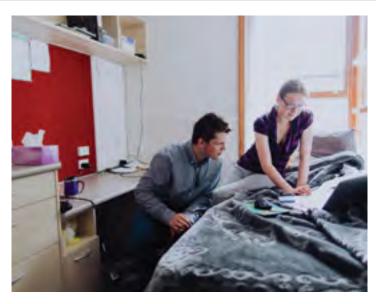
With roses growing at the entranceway and colourful vines hanging over the exquisite brickwork, you'd be forgiven for mistaking St Margaret's for a grand stately home, rather than a residential college.

But alongside the beauty of the place — located right on campus — are the excellent facilities on offer to all its college members and alumni. From our games, music and common rooms, to seminar facilities and tutorial rooms, we have everything you need to thrive academically and socially, whether you're a first year or returning student. Our regular formal dinners include guests from the greater community who offer an insight into what it takes to succeed throughout your career, while our three core values — consideration for others, common sense and courtesy — offer guidance towards achieving your goals.

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CONTACT:

Dr Charles Tustin
St Margaret's College | 333 Leith Street
Dunedin 9016
Tel 03 479 5540 | Email applications@stmargarets.college



stmargarets.ac.nz







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**Tutorials** 



**\$14,174**2017 fees

Ask any Salmond College resident what makes their college special and they'll tell you it's because it's 'home'. Friendly, welcoming and accepting of students from all walks of life, you will become part of our whānau the moment you step inside, living in a space where your individuality is celebrated – and you can be yourself.

Custom-built as a residential college in the 1970s and set in extensive grounds outside the busy campus, we offer fabulous facilities, including tutorial rooms, music rooms, library, onsite chapel, gym, tennis court, carparking and outdoor areas for volleyball, cricket and other sports. Enjoy the easy walk to campus through Dunedin's stunning Botanic Garden with your friends, knowing your college retreat is just a short walk home. Or if you have an early class or are studying late, we offer a shuttle service.

CONTACT:

Maurie Jackways Salmond College | 19 Knox Street Dunedin 9010

Tel 03 479 0750 | Email administration@salmondcollege.ac.nz



salmondcollege.ac.nz







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**Tutorials** 



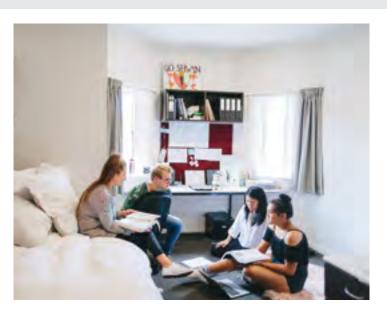
\$16,493

There's something special about being the oldest. And in a city known for its many firsts – the first university, medical and dental school – we take pride in being the country's first university college. We honour our rich heritage and traditions at Selwyn – we dress formally for dinner, remain connected with our alumni, our Selwyn Ballet is the oldest amateur all-male ballet troupe in the world, and we continue to take on Knox College every year in sporting and cultural competitions.

But make no mistake — we offer everything you need as a twenty-first century student. Our heritage buildings and grounds, located on campus, house exceptional learning and social facilities, including a full library and study centre, music room and common rooms. We also have a tennis court and the only college squash court.

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CONTACT:
Ashley Day
Selwyn College | 560 Castle Street
Dunedin 9016
Tel 03 477 3326 | Email warden.selwyn@otago.ac.nz



selwyn.ac.nz







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**Tutorials** 



\$14,060

For more than 100 years we've created a home for our students – a place where you'll feel supported as you transition into adulthood and tertiary learning.

We offer a variety of accommodation options. The original homestead is attached to our main building with several beautifully maintained bungalows, cottages and houses onsite, and our stunning grounds offer an awesome location for a friendly game of volleyball, basketball or cricket – or a place to share a meal with friends.

We understand what it takes for you to succeed. Our motto – 'Scientia Et Amor Illuminant Domum' ('knowledge and love enlightens the home') – is at the heart of our philosophy. With the right people around you – friendly staff and fellow residents – you'll be able to "give it your best shot" and achieve your goals.

#### CONTACT:

Sagato (Ziggy) Lesa Studholme College | 127 Clyde Street Dunedin 9016 Tel 03 479 5504 | Email studholme.college@otago.ac.nz



otago.ac.nz/studholme







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**Tutorials** 



\$15,010

Named after the University of Otago's first Māori graduate, Te Rangi Hiroa (Sir Peter Buck), we aim to hold true to the values, respect and mana that comes with this extraordinary individual. Each floor is named after one of the rivers in Urenui, Taranaki, where Te Rangi Hiroa lived – so his life force flows through our building inspiring you to reach your full potential – academically, physically and emotionally.

We are located centrally between campus and the city centre and, as the newest of the residential colleges, we offer large modern rooms, complete with en-suite bathrooms, alongside fantastic facilities including a movie theatre, multipurpose games area, common room, study centre and courtyard balcony. Achieve your goals in our friendly, supportive environment where we'll help you to achieve balance between work and play.

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#### CONTACT:

Te Rangi Hiroa College | 192 Castle Street Dunedin 9016 Tel 03 479 4330 | Email terangihiroa.college@otago.ac.nz



otago.ac.nz/terangihiroa







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**Tutorials** 



\$14,060 2017 fees

You've made it home – the place where you can kick off your shoes, rest and revive before you take flight, like the mighty Toroa.

We are best described as a place of belonging — a close knit collegial community where you'll feel part of the whānau straight away. Featuring modern suite-style apartment living, Toroa College is your peaceful retreat — located just a short walk from campus where you'll wake to birdsong, share a game of giant Chess or Connect Four with friends on the rooftop terrace, or hang in the multipurpose common room downstairs.

Grow and thrive in your new nesting ground where you'll be supported to achieve all your goals – academically, socially and physically – while also contributing to your community through our active volunteer programme.

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CONTACT:

Christina Watson-Mills
Toroa College | 8 Regent Road
Dunedin 9016
Tel 03 479 5500 | Email christina.watson-mills@otago.ac.nz



otago.ac.nz/toroa







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**Tutorials** 



\$14,060

Multicultural, multiethnic and home to more than 500 students, University College is your big, bold and vibrant home, where we'll help you achieve your academic goals while experiencing all that university life offers. We are the complete package – combining a perfect location (situated right on campus), great facilities (including gym, multiple common rooms, seminar rooms, library and courtyards), a supportive academic environment (a mentor for each student and close engagement with academic faculties) and a highenergy vibe.

We stand for academic endeavour, community engagement and personal development. At UniCol you'll thrive, enjoying a wide range of activities - from themed dinners to 48-hourfilm clubs, sports comps to cultural challenges or hanging with friends toasting marshmallows on our open fire.

CONTACT: Chris Addington University College | 315 Leith Street

Dunedin 9016 Tel 03 479 5580 | Email chris.addington@otago.ac.nz





otago.ac.nz/unicol



There are many accommodation options within walking distance of campus, including flats, private boarding and homestay options. The Dunedin community welcomes students and many families enjoy sharing their homes with students from other parts of New Zealand and around the world.

# Flatting

After the first year of study, many students move into flats. Dunedin has a wide range of rental accommodation – from studio rooms to multi-unit, purpose-built complexes. The Student Accommodation Centre provides an up-to-date flat list that covers one-bedroom to eight-bedroom flats. They also offer a service where flatmates can advertise to fill vacancies in their flat and they provide sample budgets for flatting, a list of students looking for flatmates, flat agreements between flatmates and helpful hints for flatting life.

# Hospitality programme

During February, the Student
Accommodation Centre runs a hospitality
programme with extended opening hours
and events for students to find flats or
meet other students to form a group to
go flatting. If you are intending to find
your own accommodation, you should
plan to arrive in Dunedin up to 10 days
before classes begin to take advantage
of this service. It is recommended that
you arrange temporary accommodation
before you arrive. Visit the Student
Accommodation Centre for more
information.

# Student Tenancy Accommodation Rating Scheme (STARS)

The STARS website is a tool for rating and recognising good quality student properties, allowing students to make informed decisions about what sort of home they rent. The STARS ratings are based on information provided by landlords on fire safety, security, insulation, heating and ventilation. You should ask landlords about the STARS rating for any property you are interested in renting.

housingstars.co.nz



#### **Homestay**

Homestay is an option that allows students to concentrate on their studies while also offering them the opportunity to join in a family lifestyle. Students are provided with breakfast and dinner Monday to Friday and three meals a day at the weekend. The student's bedroom is private and is furnished with a study desk, heater and bedroom furniture. Students are given a key to the host's home so they can be as independent as they wish.

You can arrange homestay accommodation by contacting:

University of Otago Foundation Studies 03 479 5710 uolcfy.accommodation@otago.ac.nz

# Temporary accommodation

We recommend that you book temporary accommodation before you arrive in Dunedin. A list of temporary accommodation can be found on our website:

otago.ac.nz/about/accommodation

# **Postgraduate**

Several of the residential colleges provide accommodation for a number of postgraduate students. The University of Otago has New Zealand's only residential college – Abbey College – specifically for postgraduate students. This accommodation is located within a few minutes' walk of all University facilities.

Many senior students, especially those with partners or families, prefer to rent houses or flats near shops or schools. Although there is some accommodation suitable for couples or families close to the campus, affordable accommodation is available in the suburbs, often only a short drive or bus trip from the main campus. The Student Accommodation Centre provides lists of suitable houses and flats.

# Accommodation for people with disabilities

The University of Otago is committed to assisting students with disabilities. Our residential colleges offer a range of facilities for students with disabilities, with several colleges particularly suitable for people who use wheelchairs or have limited mobility. When making an application for accommodation please advise us of your individual needs.

A number of University flats have been modified to meet the needs of students with physical disabilities and some secure properties are available for students who use guide dogs.

The Student Accommodation Centre can help you with further details but it is important to register an interest during August and September if you require accommodation for the following year.

#### International students

International students already studying in New Zealand schools can apply for colleges using the same application process as New Zealand students.

International students who want to study in New Zealand, and have applied for an academic offer to study at the University of Otago, will receive information about accommodation options.

International students may apply online at otago.ac.nz for University-managed accommodation.

The University of Otago welcomes all international students to Dunedin. International students accepted for a college can look forward to being active in the social, cultural and recreational programmes provided.

Student Accommodation Centre 109 St David Street Dunedin 9016 03 479 5100 accommodation@otago.ac.nz



# **Entrance and**

enrolling

A university entrance qualification is essential for admission to the University of Otago. Find out about our admission requirements and application process in this section, or contact one of our liaison team.

# **Entrance requirements**

To enrol at a New Zealand university you must meet minimum university entrance requirements:

- be at least 16 years old by the first day of classes in the semester you begin your study, and
- have qualified for entrance, and
- meet language requirements.

In order to be considered for entrance to the University of Otago you must gain university entrance by one of the following methods:

Admission with NZ secondary school entrance qualifications	UE via NCEA Level 3 University of Cambridge International Examinations (CIE) International Baccalaureate (IB) Other New Zealand secondary school qualifications Bursary or Scholarship Examination or Unit Standards
Admission with overseas secondary school qualifications	Australian secondary school ranking General Certificate of Education (GCE) Advanced Level International Baccalaureate (IB) taken overseas Other overseas qualifications
Admission with tertiary qualifications or study	Admission ad eundem statum with tertiary-level passes Admission ad eundem statum at graduate level
Admission from Foundation Studies	
Alternative methods of admission (not available for international students)	Discretionary Entrance Special Admission

Obtaining one of the university entrance qualifications above allows you to be considered for a place at university. As part of this consideration, to be selected you may also need to meet particular academic thresholds and other requirements that are in place for particular universities and/or qualifications.

It is important to be aware that these requirements are not necessarily the same for all qualifications and may differ between universities.

otago.ac.nz/entrance



Depending on the qualification in which enrolment is being sought, first-year undergraduates (and those transferring to Otago from other universities) are considered via either the University's Entry Pathway system for general degree programmes (and some other programmes), or by selection criteria specific to some selective entry programmes.

# The Otago system

An overview of the Otago selection system is provided below. Full details can be obtained by contacting one of the University's liaison team, or online at

otago.ac.nz/entrance

# **Admission via Entry Pathways**

A university entrance qualification is essential for admission to the University. However, not all students with a university entrance qualification will necessarily be admitted.

•••••

Caps on the number of domestic students who can enrol in general bachelors' degrees exist with selection primarily based on academic merit.

There are two pathways for admission to these programmes for new domestic undergraduate students (and certain students who have enrolled at Otago previously):

- · Preferential Entry
- Competitive Entry.

It is expected that the majority of students (apart from those applying for specialised bachelors' degree programmes, see page 58) admitted to Otago in 2018 will achieve entry via the Preferential Entry pathway. As long as enrolment patterns remain similar to previous years, a reasonable number of places will also be available via the Competitive Entry pathway.

Entry pathways do not apply to international students.

The Entry Pathway system also includes an enhanced admission system for Māori and Pacific applicants. Particular consideration may also be given to applications from prospective students with disabilities if they supply the relevant information on the form provided for that purpose, available on request from the University Information Centre.

The following information reflects the admission requirements for the 2017 enrolment year. The standards for 2018 will be confirmed in due course but are not expected to be significantly different from the 2017 standards.

The programmes subject to the Entry Pathways system are:

- Bachelor of Applied Science (BAppSc)
- Bachelor of Arts (BA)
- Bachelor of Arts and Science (BASc)
- Bachelor of Biomedical Sciences (BBiomedSc)
- Bachelor of Commerce (BCom)
- Bachelor of Laws (LLB) (first year only)
- Bachelor of Music (MusB)
- Bachelor of Performing Arts (BPA)
- Bachelor of Physical Education (BPhEd)
- Bachelor of Science (BSc)
- Bachelor of Theology (BTheol)
- · Health Sciences First Year
- Social Work Pre-professional (BA)
- · Surveying First Year
- Certificate of Proficiency (COP) for undergraduate papers
- Diploma in Language (DipLang) and Diploma in Language and Culture (DipLangC)
- other intermediate courses.

# **Preferential Entry**

Preferential Entry guarantees a place at Otago for high-calibre students (other than those applying for Special Admission or Discretionary Entrance), subject to gaining a university entrance qualification and fulfilling minimum age and language requirements.

You will qualify for Preferential Entry if you fulfil at least one of the following criteria:

- have, in Year 12 or earlier, achieved NCEA Level 2 awarded with merit or excellence
- have achieved an entry score of at least 140 points for NCEA Level 3 or have achieved NCEA Level 3 awarded with merit or excellence (see example on page 49)
- have achieved the International Baccalaureate Diploma with at least 26 points
- have achieved an entry score of at least 140 points for the Cambridge International Examinations (see example on page 49)
- have an Australian ATAR of 80 or above or an OP rank of 10 or below
- have accepted a place in a residential college owned by or affiliated to the University of Otago
- have accepted a University of Otago undergraduate scholarship
- are a recommencing Otago student, or a student transferring from another New Zealand university, or a student who has previously studied at an overseas university, with a Grade Point Average (GPA) of 4 (B-) or more for your most recent university study (only your results from your most recent equivalent two years of full-time enrolment will be considered). Where tertiary study has been undertaken other than at a university, it will be considered on a case-by-case basis depending on the programme and level of study
- are a Māori applicant, or a Pacific applicant of Polynesian, Melanesian, or Micronesian descent, who has not previously studied at a tertiary institution

but who holds or is studying towards a New Zealand university entrance qualification (you may be required to provide verified evidence of your iwi affiliations and/or of family ancestry originating from at least one relevant Pacific nation).

Note: Other than in exceptional circumstances, students who have previously studied at tertiary level will be considered on the basis of their tertiary GPA rather than their secondary school results.

In addition, you need to have applied to the University by:

- 10 December 2017 (for study commencing in the Summer School or first semester), or
- 15 June 2018 (for study commencing in the second semester).

Preferential entry automatically converts to a guaranteed place at Otago when you also meet university entrance requirements (including minimum age and language requirements).

Many who do not have Preferential Entry when they first apply may qualify later when their examination results become available or they accept a place in a residential college.

Some students may hold a university entrance qualification and meet one of the Preferential Entry criteria at the time of application. For such students a place at Otago is immediately guaranteed.

# **Competitive Entry**

New and recommencing students who do not gain Preferential Entry and are applying to a general degree programme in 2018 will be placed on the Competitive Entry pathway. Competitive Entry students will be assessed and ranked according to academic performance and other relevant criteria, and offered places in order of priority, subject to the availability of places in their nominated programmes.

It is expected that the majority of students who are initially placed on the Competitive Entry pathway will subsequently meet the criteria for Preferential Entry. Such students will then be transferred to the Preferential Entry pathway. Students

who apply after 10 December 2017 will automatically be assigned to the Competitive Entry pathway.

Applications for admission via Special Admission or Discretionary Entrance will be considered under the Competitive Entry pathway.

In every student's case, admission will be subject to meeting university entrance and minimum age and language requirements.

The system does not apply to postgraduate students, international students, or students who have accepted places in programmes that have their own selective entry regulations.

# Specialised entry qualifications

Students applying for the specialised qualifications of Bachelor of Oral Health, Bachelor of Dental Technology, Bachelor of Radiation Therapy, Diploma for Graduates, and any of our Teaching degrees (Primary and Early Childhood Education), will be considered for admission according to specific criteria for each programme and, if selected, must also meet university entrance requirements (including minimum age and language requirements) as outlined on page 46. There is an audition for Performance Music. Refer to the listings for each of these degrees in the Subject Guide in this *Prospectus*.

# An example of an entry score for an NCEA Level 3 student

An entry score will be calculated by awarding points as follows:

Excellence 4 points; Merit 3 points; Achieved 2 points

Approved Subject (best 24 credits per subject)	Excellence Credits	Merit Credits	Achieved Credits
English	3	4	9
Accounting	3	=	12
French	-	3	18
Economics	-	-	16
Statistics	2	3	10
Subtotals	8	10	65
Best 80 credits	8	10	62
Calculate points	32 pts (8x4)	30 pts (10x3)	124 pts (62x2)

#### Entry score 186

Note: Excellence and Merit credits are counted first, then Achieved credits as required to a maximum of 80 credits in up to five approved subjects.

In this example, only 62 of the achieved credits may be counted.

# Preferential Entry requirement from CIE

The entry score requirement for Preferential Entry for the applicable undergraduate programmes from CIE is 140 points. Scores that do not meet this requirement will be considered for Competitive Entry.

#### How to calculate a CIE entry score

Your entry score will be calculated on the basis of your UCAS Tariff score.

You can count no more than six subject units over the last two years of study, in subjects at AS, A2 or A level from subjects equivalent to the NCEA University Entrance approved subjects.

An A level counts as two subject units and an AS level counts as one subject unit. Students can include only their six best subject units when calculating their entry score. An entry score will be calculated by awarding points as follows:

Level	Α	В	С	D	E
A	120 points	100 points	80 points	60 points	40 points
AS	60 points	50 points	40 points	30 points	20 points

#### An example of an entry score for a CIE student:

Subject	Level	Subject units	Grade	Tariff points	Entry score
English language	А	2	D	60	60
Physics	AS	1	С	40	40
Biology	AS	1	С	40	40
Chemistry	AS	1	Е	20	20
Mathematics	AS	1	Е	20	20
French	AS	1	Е	20	nil*
Entry score: 180					

Note: In this example, French is not included as only 6 subject units may be used to calculate the entry score.

While all reasonable efforts have been made to ensure that the information contained herein is correct at the time of going to press, matters covered by this publication are subject to change. The University reserves the right to introduce changes (including addition, withdrawal or restructuring of papers and programmes) as it may judge to be necessary or desirable, and to establish limitations on enrolment where necessary to restrict student numbers. Places for students in second semester may be further limited due to availability.

# **Enrolment**

To enrol at Otago you will complete the following process.

Preparation	Application	Course enrolment	Payment of fees
Are you eligible for admission to the University?	Create your eVision account	Provide annual details	All the information you need to organise payment
What, where and when do you intend to study?	Complete and submit your application	Select your papers	is in the Finance section of your eVision account
What are the entry requirements of the programme?	University admission	Course approval	
What are the application due dates?	Programme admission	Declaration	

# eVision

The University uses an online system called eVision to handle application and enrolment. You'll use eVision as you apply to the University and enrol for your course.

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otago.ac.nz/enrolment

#### Late enrolment

While late enrolments may be accepted, we recommend enrolling in your chosen programme(s) as soon as you can. Late fees may apply where late enrolment is accepted.

#### Course advice

Course advice is a chance to talk through your course of study, and is available at any time throughout the year, or during your studies.

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otago.ac.nz/courseadvice

# Transferring from other universities

If you are or have been enrolled at another university and wish to transfer to Otago, you enrol in the same way as first-year students but you must also send an officially certified transcript (academic record), including any results for 2017, when you apply. You may apply to have work successfully completed at another university credited to your degree programme at Otago. You will be able to apply for credit via your eVision portal once you have been offered a place at Otago.

#### Australian students

Australian students living and studying in New Zealand are classified as domestic students rather than international students. They therefore pay the same fees as New Zealanders but are not necessarily entitled to Government student loans, allowances or health care.

Australian applications are assessed for admission on the basis of their Australian qualifications and, where relevant, are subject to the Entry Pathway system.

For information on entrance requirements: Freephone 1 800 468 246 (Australia) otago.ac.nz/australian-students

# University of Otago Language Centre

The University of Otago Language Centre offers comprehensive English language tuition for international students and a wide selection of courses including non-IELTS pathways to university study.

Courses include General English, preparation for IELTS, TOEFL iBT and TOEIC examinations, English for Academic Purposes, English for Study Groups, English for Teachers, non-IELTS pathways to Foundation Year, and the premium programme, English for Otago, which meets English language requirements for undergraduate and postgraduate study at the University of Otago.

The Language Centre is also the only registered examination centre south of Christchurch for the International English Language Testing System (IELTS), Cambridge Mainsuite, Internet-Based Test of English as a Foreign Language (TOEFL iBT) and Test of English for International Communication (TOEIC) examinations.

The Language Centre welcomes students from over 20 countries and features small classes of no more than 18 students. Individual attention is given to improve specific skills, and weekly social, cultural and sporting activities are organised to help students make friends and practise their English.

Students have access to University resources including libraries, 24-hour computer suites, student health, Unipol, and clubs and societies. The Language Centre provides access to a multimedia language laboratory, an independent learning centre, a computer suite for internet and email access, an intranet and a student common room.

Student support officers provide assistance with any issues, and an accommodation office helps students find quality homestays.

Tel 64 3 479 5250 Fax 64 3 479 5251 Email uolcfy@otago.ac.nz otago.ac.nz/uolcfy

# **University of Otago Foundation Year**

The University of Otago Foundation Year prepares international students, permanent residents and New Zealanders for all undergraduate degrees at Otago. Our academic streams are designed to help students prepare for, and gain the knowledge they will need for successful undergraduate study. There are students from over 25 different countries.

Four streams are available: Arts, Business/ Commerce, Health Science and Science. Bridging courses into these streams are also available.

Students are taught in lecture theatres and laboratories right on campus ensuring they feel confident and familiar with the University environment. Students will learn how to work and study independently and in small groups, and will develop

communication, time-management and problem-solving skills.

One-on-one consultation times are offered with assistance from teachers regarding learning new information and study skills.

Academic advice on future study pathways and career planning is also offered in addition to full student-support services/ activities and a comprehensive introduction to study and living in Dunedin, including a homestay placement service.

A student ID card gives access to University of Otago resources including libraries, 24-hour computer suites, student health, Unipol, clubs and societies, and discounts at cafes, and on shopping, entertainment and travel. Professional student support officers provide assistance with visa issues and any questions.

After completing Foundation Year to the required standard, students are guaranteed a place on the University of Otago first year courses for which they have prepared.

For mature students it is an opportunity to explore options for further study, particularly if students require an introduction to the skills needed for academic study at university level.

Foundation Year has three intakes per year: February, June and October.

Tel 64 3 479 5250 Fax 64 3 479 5251 Email uolcfy@otago.ac.nz otago.ac.nz/uolcfy

#### International students

The University of Otago welcomes applications from international students. You can apply for most degree programmes, although some have limitations on enrolment.

The International Office is often the first point of contact for international students who wish to study at Otago. The International Office responds to international enquiries and provides information and advice relating to entry requirements, the application process, insurance and visas. After enrolment, experienced advisers can help with study, social and personal matters.

International students should make an online application prior to 31 October 2017 (late applications not requiring evaluation for credit will be considered until 1 December).

Application links can be found on the programme information pages on the University's website.

The University of Otago, under New Zealand Government law, is required to ensure that all international students have a current student visa and hold a compliant insurance policy while they are studying in New Zealand.

Tel 64 3 479 8080 otago.ac.nz/international

Note: If you are a New Zealand citizen, or resident visa holder of New Zealand (living and studying in New Zealand), or an Australian citizen or permanent resident of Australia (living and studying in New Zealand), you are classified as a domestic student.

# **University Information Centre**

The University Information Centre in the Information Services Building should be your starting point for enquiries about:

- your course of study (including changes to your papers)
- · enrolment
- · graduation
- · examinations
- · any other administrative matters.

University Information Centre Information Services Building Dunedin Campus
Tel 0800 80 80 98 (within New Zealand) or 64 3 479 7000
Email university@otago.ac.nz
ask.otago.ac.nz
facebook.com/otagouniversity

There are also self-service kiosks located in the Information Services Building, St David Lecture Theatre Complex, Commerce Building and at University College.

# How much will it cost?

#### Fees

Details of University of Otago domestic fees for 2018 will be available in November/
December 2017. The 2017 Tuition Fee and Student Services Fee bands on this page give students an idea of what they might expect to pay but these figures may change for 2018.

Note: These figures are the fees payable for an average one-year course of study (1.0 EFTS) in the specified subject categories. The fee bands are GST inclusive and apply to New Zealand citizens and permanent residents. (Please note: Permanent residents must be resident in New Zealand for the duration of their course to be eligible to pay the domestic fee rate.) Your annual fee will depend on what papers you take and the fee band to which they belong.

Note: Tuition fees information for international students is available online:

otago.ac.nz/international

### Loans and allowances

StudyLink processes student loans and allowances on behalf of the Ministry of Social Development.

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Contact StudyLink for information and application material at: studylink.govt.nz

# 2017 undergraduate domestic tuition fee bands for subject categories

Arts, Languages, Theology, Mathematics, Education	\$5,679.00
Business, Teaching	\$5,423.00
Law	\$6,335.00
Science, Computer Science, Geography, Information Science,	Music \$6,787.00
Health Sciences (1.0 EFTS), Pharmacy, Surveying	\$7,846.00
Physical Education	\$6,787.00 - \$7,846.00
Physiotherapy – Years 2 to 3 inclusive	\$6,787.00
Physiotherapy – Year 4	\$7,920.00
Medicine, Dentistry – Year 2 onwards	\$15,087.00

# Student services fee (based on 2017)

Service	\$ (GST incl)
Advocacy and legal advice	\$58.09
Careers information, advice and guidance	\$43.97
Counselling Services (including Accommodation and Chaplaincy)	\$27.49
Financial support and advice	\$1.43
Health Services	\$251.93
Media	\$45.86
Childcare Services	\$5.26
Sports and Recreation Services facilities (including internet)	\$304.97
TOTAL	\$739.00

Some services are provided by the University, and others are purchased from contracted third parties which include OUSA.

# **Scholarships**

Fund your study with a scholarship, so that you can focus on what matters. There are hundreds of scholarships available for high-calibre first-year students attending the University of Otago for the first time in 2018. The major entrance scholarships are listed below, and there is also an online searchable database that includes scholarships for study in particular disciplines or for particular groups of students.

otago.ac.nz/scholarships

# Academic Excellence Scholarships

(Worth up to \$45,000 over three years — up to \$25,000 towards residential college accommodation fees and tuition fees in first year, and \$10,000 in second and third years)

Established by the University of Otago in 2011 to assist undergraduate students who have demonstrated outstanding academic potential and leadership capabilities. Recipients are primarily selected on the basis of outstanding previous academic performance; leadership qualities and community involvement are also considered. Applications close 15 August.

# Leaders of Tomorrow Scholarships

(\$6,000 as a contribution to or payment of (in order) first-year residential college accommodation fees or tuition fees)

Established in 2006 to assist students who have demonstrated all-round ability and who exhibit leadership potential to attend the University of Otago. Applications close 15 August.

# Māori and Pacific Peoples' Entrance Scholarships

(\$10,000 as a contribution to or payment of (in order) first-year residential college accommodation fees or tuition fees)

Established by the University of Otago in 2005 to celebrate academic excellence and cultural diversity, these scholarships are intended to encourage the progression of Māori and indigenous Pacific Islands students into tertiary study. Applications close 15 August.

#### Performance Scholarships

(\$6,000 as a contribution to or payment of (in order) first-year residential college accommodation fees or tuition fees, with an additional \$5,000 per year in the second and third years of study for either accommodation or tuition fees)

Established in 2010 to support academically-able students who have demonstrated potential to perform at an elite level in sport, culture, music or the arts. Further performance scholarships are made available through the Callis Trust. Applications close 15 August.

# Alumni-Funded and University of Otago Donna-Rose McKay Scholarships

(\$6,000 as a contribution to or payment of (in order) first-year residential college accommodation fees or tuition fees)

Alumni and friends of the University of Otago have gifted funds to provide scholarships for high-calibre students who show significant financial need. Specific alumni-funded scholarships are also available for students studying Law. Applications close 15 August.

# **New Frontiers Scholarships**

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(\$2,500 as a contribution to or payment of (in order) first-year residential college accommodation fees or tuition fees for students who attain excellence at either Level 2 or Level 3 NCEA. \$5,000 as a contribution to or payment of (in order) first-year residential college accommodation fees or tuition fees students who attain excellence at both Level 2 and Level 3 NCEA)

Established in 2015 to recognise academic excellence in secondary school study for students who have achieved Level 2 or Level 3 NCEA endorsed with excellence. Equivalent grades for international qualifications are also recognised. Applications close 4 March.

# **Dux Scholarships**

(Up to \$6,000 as a contribution to or payment of (in order) first-year residential college accommodation fees or tuition fees. The emolument varies dependent on other entrance scholarships held by the student)

The Dux of every secondary school in New Zealand is eligible for this scholarship. No application is necessary since the status of Dux automatically qualifies the student for a University of Otago Dux Scholarship.

#### **Science Horizons Scholarships**

(\$3,000 per annum for the duration of an undergraduate degree programme in Sciences)

Established in 2006 by the Division of Sciences to encourage highachieving students to enrol in undergraduate degree programmes in Sciences at the University of Otago. Applications close 10 December.



# An Otago degree

Worried about majors and minors and prerequisites and corequisites? This section cuts through the jargon to help you decide on a degree, and how to structure it to suit your needs.

# **Terminology**

### Degrees

The qualification you normally aim for at university is called a degree. In New Zealand each university has its own degrees, and each has different requirements governing the awarding of a degree.

Each degree has an abbreviation, such as BA or BCom, which you can use after your name once you have graduated.

Your first degree is called a bachelor's degree and the subject you choose to specialise in is called your major.

A degree almost always includes subjects other than your major, but the major subject is generally studied in every year of the course. This choice of major subject (or subjects) determines which degree you are actually taking.

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### **Papers**

The building blocks of the degree are called papers. A paper is a fixed amount of work in certain aspects of a subject at a particular level.

The first papers you take are called 100-level papers. You move on in subsequent years or semesters to 200-level and 300-level papers (and beyond, if you choose). Most of your 300-level papers will be in your major subject.

Each degree has its own set of subjects and papers, although a number of subjects can be taken as a major subject for more than one degree. For example, Economics can be a major in a BA, BSc, BASc or a BCom. The rules of most degrees allow you to include a limited number of papers that would normally count for other degrees.

#### Codes

Each university paper is identified by its subject code, a three-digit number and a subject name. For example, there are two first-level Geography papers, GEOG 101 Physical Geography and GEOG 102 Human Geography. They are referred to as GEOG 101 and GEOG 102.

Second-level papers are numbered in the 200s (e.g. GEOG 210, etc.) and third-level papers in the 300s.

#### **Points**

Each paper is worth a number of points that you earn when you pass. To complete a degree you must accumulate a number of points, with a required number at higher levels. You cannot earn a degree simply by taking lots of 100-level papers over three or four years.

Most papers are single semester papers and are worth 18 points. If you pass, you get all the points. Your grade shows how well you passed but does not affect the number of points you earn.

#### Major subjects

Each subject has papers you must take to major in that subject. This usually means a number of 300-level papers, and requirements at 200- and 100-levels. It may also include papers from other subjects.

The major requirements for each degree are set out in the *Guide to Enrolment*, available each year in August and also on the University's website. The 100-level requirements for each subject are in Section 6 of this *Prospectus*.

Choosing a major subject is one of your most significant decisions. You do not necessarily have to make this decision in your first year, because there are usually several other subjects besides your major subject in your first-year course. A well-planned first year allows you flexibility of choice, but at the same time should cover any prerequisites there may be for 200- and 300-level papers you may choose later.

### Prerequisites and corequisites

Most papers beyond 100-level have prerequisites. If you have not completed a prerequisite for a paper, you are not normally permitted to enrol in that paper. For example, if you wish to take GEOL 251 Minerals and Rocks, the prerequisite (listed in the *Guide to Enrolment*) is shown as GEOL 112 Dynamic Earth.

Some papers have corequisites. If you have not already passed a corequisite, you must take it at the same time as your other paper.

# Minor subjects

It is possible to gain formal recognition for a minor subject within a BA, MusB, BPA, BTheol, BSc, BAppSc, BCom, or BASc programme. To be recognised as having achieved a minor you are normally required to complete a minimum of 90 points in that subject with at least 18 points at 300-level. Your minor can be a subject more commonly taken for a different degree; for example, a BCom majoring in Marketing Management can include Japanese Language as a minor subject.

The *Guide to Enrolment* and the University website have a list of subjects available for a minor subject and information about minor requirements.

# Workload

A full-time first-year course is generally 54-72 points in any one semester or 108-144 points in any one year. As an approximate guide, you can expect to spend about 12 hours per week for each single-semester paper (18 points). These hours are made up of a combination of lectures, tutorials, laboratories, assignments and reading.

Very able students may take 144 points annually with the load spread as evenly as possible between both semesters. Most take fewer points (126 or 108) or study parttime. Part-time study is taking fewer than 54 points in any one semester or 108 points in any one year. Part-time students do not normally receive student allowances, and obviously take longer to complete degrees.

#### **Disabilities**

If you have a disability, impairment or medical condition that may affect your study, please contact:

Disability Information and Support Tel 03 479 8235 Email disabilities@otago.ac.nz

# Teaching

The basic method of presenting subject information at university is the lecture, although many departments use a variety of other approaches.

Lectures normally last 50 minutes and, in many first-year subjects, there can be up to 500 students at a lecture at one time. You may not have much opportunity to ask questions. Lectures are only a basic means of introducing new knowledge. You must back them up with your own wide reading.

You will have essays and assignments, and may take part in laboratories or tutorials — these are teaching and discussion classes of 12-20 students where more individual attention is available. You may also find you are in regular contact with tutors, other academic staff and other students.

Lecturers and tutors do not spend much time (if any) helping you meet deadlines as school teachers may have done. The responsibility is almost entirely your own.

#### Assessment

Papers are assessed in a variety of ways. Examinations (finals) are usually the most important and most papers end with a three-hour examination. Finals are held at the end of each semester. Full-year papers are examined at the end of the second semester.

Many subjects also have shorter tests during the year, and written assignments and laboratory work often count towards your final grade. The proportion of the final grade awarded on the basis of internal assessment during the year varies with different subjects, but is often about 20 to 30 per cent.

For some papers, students must gain "terms" before being able to sit the final examination. The ways students gain terms vary from paper to paper. They may be attending a number of lectures or laboratories, taking part in seminars and practical sessions, or submitting an amount of written work.

These requirements are made clear at the beginning of each semester in each subject.

#### Semesters

The University operates two semesters per year. Some papers are completed in a single semester (i.e. a half year, either first or second semester), while others run for the whole year. Most 100-level papers occupy only one semester.

Some single-semester papers are offered in each semester, while others occur only once a year.

In planning your year's work, it is advisable to balance your workload between the semesters. The *Guide to Enrolment* and the University website provide semester details for every paper.

#### **Summer School**

The University offers a Summer School from early January to mid-February each year. This gives students the opportunity to study one or two papers for credit over a shorter teaching period and outside the standard semester timetable.

# **Textbooks**

Students buy their own textbooks. Costs vary from subject to subject, but many students spend more than \$500 a year. Details of prescribed textbooks are available on the University Book Shop's website: unibooks.co.nz

Don't rush out and buy every book on your list before you have found out what texts your lecturers intend to focus on. Second-hand textbooks can be bought at the beginning of the academic year.

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# **Distance Learning**

The University offers some papers and courses by distance study. Most distance-taught courses are postgraduate courses offered in subjects where the University has specific expertise. However, there are some papers and courses for undergraduate students, including a preparatory Summer School course in Chemistry called CHEM 150 Concepts in Chemistry.

Distance Learning undergraduate papers are offered in:

- Aquaculture and Fisheries (one third year paper only)
- Chemistry
- Chinese
- Education
- · Religious Studies and Sanskrit
- Social Work (third and fourth year papers only)
- Surveying
- Theology (Biblical Studies, Christian Thought and History, Hebrew, Pastoral Studies)
- Tourism.

Distance Learning qualification:

· Bachelor of Theology

For a copy of the *Distance Learning Prospectus*: Tel 0800 80 80 98 Email university@otago.ac.nz otago.ac.nz/distancelearning



Undergraduate programmes at Otago can be divided into two main types:

- general degrees
- specialised degrees.

# **General degrees**

BAppSc Bachelor of Applied Science

BA Bachelor of Arts

BASc Bachelor of Arts and Science

BBiomedSc Bachelor of Biomedical

Sciences

BCom Bachelor of Commerce

MusB Bachelor of Music

BPA Bachelor of Performing Arts

BPhEd Bachelor of Physical

Education

BSc Bachelor of Science

BTheol Bachelor of Theology

Each of these degrees (except for BASc and BPhEd) requires a minimum of 360 points. At least 180 of these must be above 100-level and at least 72 must be at 300-level in your major. There must be a major subject in every degree other than the MusB, BPA and BTheol, which means that you must satisfy the major requirements for that subject.

It is often possible to include two major subjects in a degree programme (a "double major").

In Arts, Music, Performing Arts, Theology, Science and Commerce degrees, you can include papers from other degrees worth up to 90 points.

The BASc degree requires at least 480 points and requires two major subjects: one from those available for BA and one from those available for BSc or BAppSc.

The BPhEd degree requires at least 504 points with a choice of four major subjects and scope for papers worth up to 126 points from other degrees.

# Specialised degrees

The following qualifications are more specialised with restricted choices of papers:

BDS Bachelor of Dental Surgery

BDentTech Bachelor of Dental

Technology

LLB Bachelor of Laws

BMLSc Bachelor of Medical

Laboratory Science

MB ChB Bachelor of Medicine and

Bachelor of Surgery

BOH Bachelor of Oral Health

BPharm Bachelor of Pharmacy

BPhty Bachelor of Physiotherapy

BRT Bachelor of Radiation

Therapy

BSW Bachelor of Social Work

BSurv Bachelor of Surveying

BTchg Bachelor of Teaching

(endorsed in Early Childhood Education, Primary Bilingual Education and Primary

Education)

Note: There is also a one-year postgraduate degree programme in teacher education for students who have already completed a degree.

The BDentTech, BOH, BRT and BTchg have selective entry at first year. The rest of these degrees have selective entry to the second year, and each has its own subjects, structure and admission procedures.

BDS Bachelor of Dental Surgery

BMLSc Bachelor of Medical

Laboratory Science

MB ChB Bachelor of Medicine and

Bachelor of Surgery

BPharm Bachelor of Pharmacy

BPhty Bachelor of Physiotherapy

These specialist degrees require a Health Sciences First Year. Admission to the second year of each degree depends on the results in the first-year course. For details, see the subject entries for each and for the Health Sciences First Year in the Subject Guide in Section 6 of this *Prospectus*.

# Double degrees and cross crediting

It is possible for students to take two degrees at the same time. This doesn't mean you double your workload. You can count some papers twice, by studying them in one degree and cross crediting them to the other degree as well. This means you can complete two degrees in less time than if you had studied them separately.

Students can cross credit 126 points between two three-year degrees, so that 594 points are required instead of 720 to complete two three-year degrees such as a BA and a BSc. This takes between four and five years, depending on how many papers are passed each year.

You may cross credit 180 points between a four-year degree and a three-year degree (e.g. LLB and BSc, or BPhEd and BCom), saving two years and completing both degrees in five years instead of seven.

If you want to plan a double-degree course, seek advice from a course adviser, schools' liaison officer, or staff in the Student Records Office of Student Administration.

Entry requirements for double-degree programmes are the same as for the individual degrees involved. If one of the degrees has restricted entry (e.g. LLB) then you still have to meet the entry requirement for that degree if you are taking it together with a general degree (e.g. LLB and BCom).

You do not have to enrol for a double-degree programme in your first year. Many students take a mixture of papers from two degrees in their first year (you are allowed to include some papers from another degree in your primary degree). You can then decide at the beginning of the second year whether or not to set up a double-degree structure.

# Honours degrees and postgraduate study

Many students wish to take more than a standard bachelor's degree in preparation for employment or further study.

Most bachelors' degrees have an associated honours degree, with selective entry. The honours degrees associated with the general degrees are postgraduate qualifications, requiring a separate fourth year of study. The honours degrees associated with the specialised degrees are postgraduate qualifications in some cases (and so need a further year of study) but in other cases involve additional papers and a research project which are completed concurrently with the final one or two years of the standard programme.

Honours degrees are usually awarded at first-class or second-class level.

Most subjects also have a one-year postgraduate diploma programme or a two-year master's degree programme.

If you have an honours degree or have already gained a postgraduate diploma, you can apply to take a one-year master's programme, or you may even decide to go on to a Doctor of Philosophy (PhD) programme, which generally takes three years or more.

A useful qualification for graduates is the Diploma for Graduates (DipGrad), a one-year personalised selection of papers chosen to suit your particular needs.

# Sample degree structures

Otago's flexible degree structure means it is possible to combine most subjects, majors and degrees.

An Otago schools' liaison officer can help you plan the course you would like to take.

The following are examples of some possible degree and double-degree structures:

# SAMPLE DEGREE STRUCTURE FOR

# Bachelor of Commerce, BCom

360

MAJOR SUBJECT: Accounting, MINOR SUBJECT: Management







# FIRST SEMESTER

Paper Code	Paper Name	Points
BSNS 111	Business and Society	18
BSNS 112	Interpreting Business Data	18
BSNS 115	Accounting and Information Systems	18



Paper Code	Paper Name	Points
ACCT 211		10
	Reporting	18
ACCT 233	Fundamentals of Accounting	g for
	Financial Decisions	18
MANT 250	Managing People	18

# FIRST SEMESTER

Paper Code	Paper Name	Points
ACCT 302	Accounting Performance	
	Management	18
ACCT 315	Advanced Financial Accoun	nting 18
MANT 330	Leadership	18

# SECOND SEMESTER

Paper Code	Paper Name	Points
ACCT 102	Principles of Accounting	18
BSNS 113	Economic Principles and Po	licy 18
BSNS 114	Financial Decision-Making	18
MANT 101	Managing for Performance	18
TOTAL POINTS		126

# SECOND SEMESTER

Paper Code	Paper Name	Points
ACCT 222	Cost and Management Accounting	18
MANT 252	Developing Responsible Leadership	18
MAOR 110	Introduction to Conversation Māori	nal 18
TOUR 102	Global Tourism	18
TOTAL POI	NTS	126

# SECOND SEMESTER

Paper Code	Paper Name	Points
ACCT 306	Accounting Information Sys	tems18
ACCT 325	Corporate Sustainability Accounting and Reporting	18
MANT 311	Business Ethics	18
TOTAL POINTS		108
GRAND TO	)TAL	360

For BCom degree regulations see otago.ac.nz/courses/qualifications/bcom.html

# Bachelor of Science, BSc

MAJOR SUBJECT: Genetics



# FIRST SEMESTER

Paper Code	Paper Name	Points
CELS 191	Cell and Molecular Biology	18
CHEM 191	The Chemical Basis of Biolog and Human Health	y 18
HUBS 191	Human Body Systems 1	18



# FIRST SEMESTER

Paper Code	Paper Name	Points
BIOC 221	Molecular Biology	18
GENE 221	Molecular and Microbial Genetics	18
MICR 221	Microbes to Medicine	18
PSYC 111	Brain and Behaviour	18



# FIRST SEMESTER

Paper Code	Paper Name	Points
BIOC 352	Advanced Molecular Biology and Bioinformatics	18
FREN 131	Introductory French 1	18
GENE 315	Genomes	18

# SECOND SEMESTER

Paper Code	Paper Name F	Points
BIOC 192	Foundations of Biochemistry	18
HUBS 192	Human Body Systems 2	18
PUBH 192	Foundations of Epidemiology	18
STAT 115	Introduction to Biostatistics	18
TOTAL POINTS		126

# SECOND SEMESTER

Paper Code	Paper Name	Points
GENE 222	Genes, Chromosomes and Populations	18
GENE 223	Developmental and Applied Genetics	18
ZOOL 222	Evolutionary Biology	18
TOTAL POINTS		126

# SECOND SEMESTER

Paper Code	Paper Name	Points
FREN 132	Introductory French 2	18
GENE 312	Evolutionary Genetics	18
GENE 313	Medical Genetics	18
TOTAL POINTS		108
GRAND TOTAL		360

# SAMPLE DOUBLE-DEGREE STRUCTURE FOR

# Bachelor of Laws and Bachelor of Arts, LLB, BA

DOUBLE DEGREE: LLB and BA
BA MAJOR SUBJECT: Politics
BA MINOR SUBJECT: Economics





# FIRST SEMESTER

Paper Code	Paper Name	Points
BSNS 113	Economic Principles and Pol	icy 18
LAWS 101	The Legal System (full year)	
POLS 101	Political Philosophy – Basic Problems	18
RELS 102	Introduction to Hinduism and Buddhism	18

# FIRST SEMESTER

Paper Code	Paper Name	Points
LAWS 201	Criminal Law (full year)	
LAWS 202	Law of Contract (full year)	
LAWS 203	Property Law (full year)	
LAWS 204	Public Law (full year)	
LAWS 298	Legal Writing (full year)	

# SECOND SEMESTER

Paper Code	Paper Name	Points
ECON 112	Principles of Economics 2	18
LAWS 101	The Legal System (cont.)	36
POLS 102	New Zealand Politics – Introduction	18
TOTAL POI	NTS	126

# SECOND SEMESTER

Paper Code F	Paper Name	Points
LAWS 201 (	Criminal Law (cont.)	30
LAWS 202 I	Law of Contract (cont.)	30
LAWS 203 F	Property Law (cont.)	30
LAWS 204 F	Public Law (cont.)	30
LAWS 298 I	_egal Writing (cont.)	0
TOTAL POIN	ITS	120









# FIRST SEMESTER

Paper Code	Paper Name	Points
ECON 201	Microeconomics	18
LAWS 301	Law of Torts (full year)	
LAWS 302	Jurisprudence (full year)	
LAWS 398	Legal Research Skills (full yea	r)
POLS 208	Democracy	18
POLS 215	Politics and the Media	18

# FIRST SEMESTER

Paper Code	Paper Name	Points
LAWS 311	Family Law (full year)	
LAWS 404	Administrative Law	15
LAWS 440	Environmental Law	15
POLS 310	Turkey and Its Neighbours	18
POLS 312	Ethics and International Relations	18

# FIRST SEMESTER

Paper Code	Paper Name	Points
LAWS 407	Company Law	15
LAWS 413	Labour Law	15
LAWS 464	Advocacy	15
LAWS 469	Law and Religion	15
LAWS 499	Advocacy Skills	0
POLS 319	Treaty Politics	18

# SECOND SEMESTER

Paper Code	Paper Name	Points
ECON 207	Environmental Economics	18
LAWS 301	Law of Torts (cont.)	30
LAWS 302	Jurisprudence (cont.)	30
LAWS 398	Legal Research Skills (cont.)	0
POLS 211	Global Political Economy	18
TOTAL POINTS		150

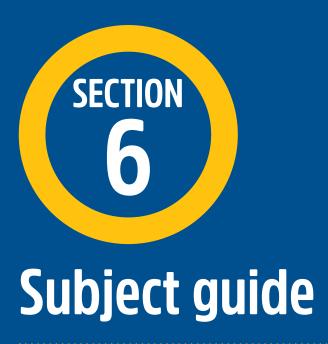
# SECOND SEMESTER

Paper Code	Paper Name	Points
LAWS 311	Family Law (cont.)	30
LAWS 414	Law of Evidence	15
LAWS 415	Resource Management Law	15
LAWS 424	International Criminal Court	15
LAWS 498	Research and Writing	0
PHIL 103	Ethical Issues	18
TOTAL POINTS		159

# SECOND SEMESTER

Paper Code   F	Paper Name	Points
ECON 302 I	International Trade	18
LAWS 406 (	Civil Procedure	15
LAWS 463 I	Legal Ethics	15
LAWS 468 /	Advanced Company Law	15
POLS 318 (	Chinese Foreign Policy	18
TOTAL POINTS:		159
GRAND TOTAL		714

(This includes cross credits of 180 points between these degrees)



Still deciding what you want to study?

Explore the full range of options available at the University of Otago in this subject guide.

Each subject entry within this alphabetical listing explains exactly what the subject is and presents potential career opportunities. There is also information about the papers you need to study in your first year and brief paper descriptions to help you decide if the subject sounds like you.

Don't forget: if you are unsure about anything, just phone or take a look at the website.

The University's *Guide to Enrolment*, which comes out in August, contains more detailed information on all of the papers on offer and you can also request subject information sheets online.



# **Accounting**

Accounting is the language of business.

Accounting concepts come into play when you're checking your bank balance online or filling out IRD tax forms. While studying for a BCom in Accounting, you'll learn all about the recording and reporting of financial activity. Businesses, the government, city councils, schools and boards of trustees all use accounting to help control their resources and measure their success. In fact, everyone needs to know about accounting to meet the challenges of our society.

# Career opportunities

Many graduates join the accounting profession as auditors, tax advisers, financial managers, investment advisers, financial consultants, valuation experts, company directors and controllers of financial information systems.

Other graduates work in a variety of occupations such as financial executives, company secretaries, management accountants and office managers or accountants in manufacturing or trading firms; others become teachers or research workers in educational institutions or executive officers, treasurers and accountants in central and local government.

#### 100-level papers

If you intend to major in Accounting (BCom), you must take the following 100-level papers:

ACCT 102	Principles of Accounting
BSNS 112	Interpreting Business Data
BSNS 114	Financial Decision-Making
BSNS 115	Accounting and Information Systems

You must also meet BCom degree requirements, including the completion of all BCom core BSNS papers – see the Business and Commerce entries for details.

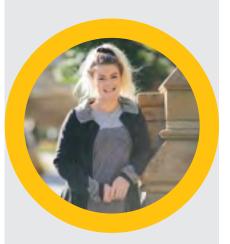
### 200-level and beyond

The Department of Accountancy and Finance teaches financial accounting, management accounting, financial management, accounting information systems, business law, taxation and auditing at 200-level or above. The four 100-level papers listed above must be passed with a grade of at least a C+ (60%) in order to study Accounting at 200-level.

To practise as a chartered accountant you must complete specified accounting papers and professional papers in business law, tax and audit as part of your BCom degree and then seek admission to a professional body. The Department of Accountancy and Finance provides the academic papers required for full or partial provisional entry into four professional accounting bodies. These are: Chartered Accountants Australia & New Zealand (CAANZ), CPA Australia, ACCA (UK) and CIMA (UK). There will be additional requirements after university (practical experience and/ or further technical/academic modules) to be completed to become a chartered accountant. For further information visit otago.ac.nz/accountancyfinance/study/ professional qualifications/index.html or the individual professional body websites: charteredaccountantsanz.com or nzica. com (CAANZ), cpaaustralia.com.au (CPA Australia), accaglobal.com (ACCA) and cimaglobal.com (CIMA).

# **Anatomy**

A degree in Anatomy offers you a world of choice! As an Anatomy student, you have the flexibility to play to your strengths and study aspects of biology that really interest and excite you. The Department of Anatomy is divided into four key areas of research expertise: Neuroscience,



# Accounting

"Studying accounting at Otago has provided many rewarding opportunities - including interviewing Prime Minister Bill English and completing an enjoyable summer internship with Ernst & Young (EY) in Wellington. Otago's reputation for producing sought-after accounting graduates was a key factor in my decision to study here - I'll have the qualifications and skills to work in private or public practice, both in New Zealand or internationally."

#### Gemma Duckett

Studying towards a Bachelor of Commerce (Accounting and Finance)



# Anatomy

"I chose to study the science behind how all the components of the human body fit together and interact to make a functioning being. I'm fascinated by the way a body can adapt over the course of a lifetime, with changes in muscle, tendon and bone reflecting different aspects of an individual's life. And through my work as a tissue bank technician, I feel like I'm making an important contribution to future medical research."

# Charlotte Verstappen

Bachelor of Science with Honours (Anatomy) Tissue Bank Technician, University of Auckland Biological Anthropology, Reproduction and Developmental Biology, and Clinical/ Functional Anatomy. Your degree can explore all these areas, or concentrate on just one or two. You also have the opportunity to add in Genetics, Physiology, Biochemistry, Anthropology and most other courses of study. Anatomy is also an excellent path to getting entry into the health professions, including Medicine, Dentistry, Pharmacy and Physiotherapy. We collaborate with leading research institutions and universities all around the world, and our alumni end up in diverse occupations all over the globe.

# Career opportunities

A degree in Anatomy positions you well to have a world of choice in your career as well. Many graduates proceed to the health professions and higher degrees, including Master of Science and PhD. Our graduates can also be found in a range of interesting and exciting fields. Here's just a small sampling of what some Anatomy graduates are now doing: national health promotion adviser for the Cancer Society, genetic counsellor, developing Māorifocused science education policy for the Ministry of Education, respiratory therapist helping to diagnose conditions such as sleep apnoea and asthma, St John Ambulance Officer, admissions co-ordinator for a DHB, exercise prescription instructor, research position in a hospital analysing cells and diagnosing chromosomal conditions, technicians and research assistants supporting teaching and research, account manager and sales representative for a medical supply company, medical writer evaluating clinical trial evidence from journals, lab assistant in a cytogenetics laboratory, trainee funeral director, and sales representatives for various pharmaceutical companies.

# 100-level papers

There are no 100-level papers with an ANAT code as part of a major in Anatomy.

If you intend to major in Anatomy (BSc), you must take the following 100-level papers:

CELS 191	Cell and Molecular Biology
and	
HUBS 191 and	Human Body Systems 1
HUBS 192 and	Human Body Systems 2
CHEM 191	The Chemical Basis of Biology and Human Health

# 200-level and beyond

200-level topics include the structural and functional organisation of:

- the human body at cellular, tissue, system and regional levels
- the nervous system at the cellular, tissue, system and integrative levels
- male and female reproductive systems including consideration of fertilisation, implantation, pregnancy, lactation and an introduction to development.

300-level explores aspects of functional anatomy, cell biology, neurobiology, reproductive biology, developmental biology, biological anthropology, delving into the research literature and addressing/ formulating research questions.

All 200-level and 300-level papers can also be taken as single papers to complement other biomedical and/or science majors.

# Anthropology and Archaeology

There are two broad areas of Anthropology studied at Otago: Social Anthropology and Archaeology.

Social Anthropology focuses on the cultural basis of social life and diversity and similarities between cultures. It examines the dynamics of cultural change at every level of human life, from the local to the global, in the past as well as the present.

Social Anthropology specialisations at Otago include the Pacific, history and anthropology, medical anthropology, religion and ritual, ethnicity, development, political anthropology, legal anthropology, economic anthropology, globalisation, migration, new media, and anthropological theory and methods. Our social anthropology staff are the recipients of multiple teaching awards and conduct dynamic national and international research programmes.

Archaeology is the study of material remains related to the human past. These range from monumental structures like the pyramids of Egypt to microscopic plant fragments retrieved from ancient soils. Archaeological research is undertaken on historical remains to add to existing records, as well as on the physical remains of human culture when no other record exists.

Otago has a world-renowned Archaeology programme. Staff specialise in the archaeology of New Zealand (including the offshore Chatham Islands), the tropical Pacific and South-East and East Asia. They study the initial colonisation of, and subsequent adaptations to, these regions through fieldwork and laboratory analysis. Otago archaeologists also study evidence of ancient crops, animals and artefacts, as well as archaeological structures and landscapes. The past is interpreted from the study of material remains and evidence recovered through surveys and excavations.

### Career opportunities

Many graduates become professional anthropologists, museum staff, social scientists and teachers, researchers, writers, policy analysts and advisers with government ministries and departments. Anthropology graduates are sought by nongovernmental and private organisations.

Graduates who have specialised in archaeology may become professional archaeologists working variously in universities, consultancies and industries with heritage management interests (e.g. mining), public heritage or conservation agencies, and in specialist laboratories and museums.

# 100-level papers

A major in Anthropology requires two 100-level papers from:

ANTH 103 Introduction to Anthropology
ANTH 105 Global and Local Cultures
ANTH 106 Human Origins and Civilisations

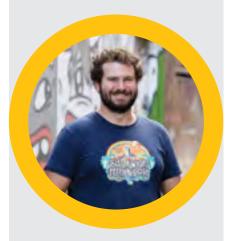
ANTH 103 Introduction to Anthropology Introduces fundamental concepts and branches of Anthropology and the development of fieldwork methods and theoretical frameworks in Archaeology and Ethnography.

ANTH 105 Global and Local Cultures

Explores contemporary issues drawing on case studies – from cyberspace to island village communities. Reflects upon the latest anthropological thinking about culture and society with critical insights into contemporary cultures.

ANTH 106 Human Origins and Civilisations A review of the archaeological evidence for the origins and cultural development of the human species from its earliest appearance up to and including the rise of early civilisations.

Please note: In case of any changes to paper codes, see the latest information on paper codes on the University of Otago website.



# Anthropology

"Studying social anthropology gave me the ability to look at the world in a new way. We learnt about cultural relativism, which is so relevant to my job. I work with young people who come from many different cultures and who have an incredibly wide range of values. A huge part of my job involves incorporating goals into each person's unique cultural and value system to help them reach their potential."

Harry Saunderson-Warner Bachelor of Arts with Honours (Anthropology) Youth Coach, Tui Ora, Taranaki

### 200-level and beyond

200-level papers in Social Anthropology cover contemporary Pacific cultures, visual culture, ethnography and globalisation. At an advanced undergraduate level students may take papers that address ethnographic research, health and reproduction, religion and the supernatural, ritual and death, labour and work, human development, money and transnationalism.

200- and 300- level papers in archaeology cover New Zealand, Pacific and Asian archaeologies, as well as the study of animals, landscapes, methods, practice and theory in archaeology. Specialist lab and field training begins at 300-level. At 400-level, papers and a dissertation can provide opportunities for advanced study. There are also opportunities for supervised lab research and archaeological excavation fieldwork.

# **Applied Geology**

The economic and commercial value of geological resources, their discovery and extraction, and the environmental consequences of their production, are critical components of modern civilisation. Applied Geology graduates are in high demand for their technical and managerial skills. Employment is found in organisations that deal with the extraction of metals, petroleum, coal and groundwater resources; with regulatory bodies associated with geological resources and the environmental impact of their extraction; and in agencies concerned with geological hazards such as earthquakes, landslides and volcanoes.

If you are interested in a career in Applied Geology, contact the programme director, Associate Professor Andrew Gorman (andrew.gorman@otago.ac.nz).

#### 100-level papers

Papers worth at least 126 points, including:
EAOS 111 Earth and Ocean Science
GEOL 112 Dynamic Earth, a New Zealand
Perspective
MATH 160 Mathematics 1 (Algebra and
Calculus)

# **Applied Science**

The Bachelor of Applied Science is an interdisciplinary three-year degree that is structured to deliver a lifelong set of employer valued skills in problem-solving, learning and communication. These skills provide graduates with flexibility and adaptability in an increasingly competitive global work environment.

The Applied Science majors are employment-sector focused: Applied Geology, Aquaculture and Fisheries, Clothing and Textile Sciences, Computational Modelling, Consumer Food Science, Energy Management, Environmental Management, Forensic Analytical Science, Geographic Information Systems, Molecular Biotechnology, Software Engineering, Sport and Exercise Nutrition, and Sports Technology.

Diverse interdisciplinary capability is highly desired by employers and is mandated through a second subject that may be taken as a minor or second major and could come from Commerce, Humanities or Sciences.

The degree programme provides substantial flexibility of choice, career focus and is informed by strong links with employers. See the entries for each of the majors for more details.

# **Aquaculture and Fisheries**

Aquaculture and Fisheries is a major in the Bachelor of Applied Science programme. It is a three-year degree that includes a compulsory second subject in a related area – either as a minor or as a double major.

From salmon and mussel farming to wild fish management, there is substantial industry demand for skilled and innovative individuals with a passion for marine science. Aquaculture and fisheries scientists are essential as the global market for marine products is rapidly expanding but increasingly affected by human activities

including overfishing and global climate change. Fisheries science is the study of managing and understanding fisheries and their impacts, while aquaculture involves the production of aquatic species in landor sea-based "farms".

Fisheries and aquaculture scientists require a good understanding of biology, ecology, oceanography, chemistry, statistics and business management. You will learn fundamental aspects of these subjects in first and second year. As you progress through the course, more specialist subjects such as fisheries, aquaculture, food science and entrepreneurship will be introduced.

If you are interested in a career in aquaculture and fisheries, contact the Marine Science department: aqfi@otago.ac.nz

First-year papers could include:

MARI 112	Global Marine Systems
BIOL 112	Animal Biology
BIOL 123	Plants: How They Shape the World
CELS 191	Cell and Molecular Biology
CHEM 191	The Chemical Basis of Biology and Human Health
EAOS 111	Earth and Ocean Science
ECOL 111	Ecology and Conservation of Diversity
STAT 110	Statistical Methods

Note: The course must include either a minor or a second major in a related subject area. This supporting subject can be from Commerce, Humanities or Sciences.

Marine Science postgraduate courses are open to students with a Bachelor of Science or Applied Science in related disciplines such as Aquaculture and Fisheries, Zoology, Botany, Microbiology, Chemistry, Physics, Mathematics and Geology. Some training in Mathematics and Statistics is required.

# **Archaeology**

See Anthropology and Archaeology.

# Art History and Visual Culture

Art is an essential part of the human experience. It is seen and made everywhere. Developing our historical and theoretical knowledge of visual art and culture helps us better understand the world in which we live. Art History and Visual Culture students learn to appreciate the fundamental and varied roles the visual arts play in the lives of human beings. Both Art History and Visual Culture students learn how works of art embody, condition and control cultural, economic, social, religious, political, racial and gender dynamics.

#### Career opportunities

A degree in Art History and Visual Culture provides a foundation for careers in education, arts administration, museums, galleries, conservation, historic preservation, libraries, archives, publishing, art criticism, journalism, advertising, international tourism and art investment.

As the world becomes increasingly flooded with images, critical visual "reading" skills as taught by Visual Culture become more and more important for a wide variety of careers in both the private and public sectors.

#### 100-level papers

If you intend to major in Art History and Visual Culture (BA or BASc), you must take two ARTV 100-level papers (any 100-level HIST paper may be substituted for one ARTV paper).

#### ARTV 102 Interpreting Artworks

The close analysis of ways in which, historically, major individual artworks can have meaning, and a demonstration of a variety of theoretical, cultural, historical and aesthetic approaches to interpretation in art.

#### ARTV 103 Art: Here and Now

An introduction to historical and contemporary art through the rich cultural offerings of Dunedin. Features weekly field trips for first-hand study of art and meetings with local arts organisations and professionals.

# 200-level and beyond

Topics include Medieval and Italian Renaissance art, New Zealand art, twentieth-century painting and theory, contemporary art, photography, perspective, surrealism, gender issues in art and totalitarian art.

# **Asian Studies**

Both from the economic and the cultural points of view, Asia has become a vital part of New Zealand life. Asian Studies is an interdisciplinary programme that includes Asian history, literature, film, religion, politics, music, anthropology and economics. Papers in Asian Studies help students gain a greater awareness of New Zealand's largest neighbours and trading partners, where ancient cultural traditions mix with cutting-edge modern technology, and learn why Asia has become the economic and cultural powerhouse of the 21st century.

# Career opportunities

An understanding of Asia opens up a great variety of international or domestic career paths in private and public sectors, in industry and government.

#### Core papers

ASIA 101 Introducing Asia

Kung Fu? Sushi? Gangnam Style? Bollywood? Gandhi? Mao Zedong? Pokemon?

What do we really know about Asia?

This multidisciplinary course develops students' knowledge and understanding of the Asian region, society, people and cultures.

ASIA 201 Asian Popular Cultures

Why do we consider this to be the "Asian century"? How does popular culture crucially contribute to Asia's changing and growing role in the world?

This course is an exploration of contemporary Asia through the analysis of popular culture, with a focus on media.

ASIA 301 Topics in Asian Studies

A comparative study of selected themes in the history of Asian societies, such as nationalism, modernisation and transnational issues.



# **Biblical Studies**

Biblical Studies is devoted to the study of the Jewish and Christian Scriptures. It looks at the origins and interpretation of biblical writings and the history of their interpretation. Biblical Studies papers are divided between the Old Testament (the Hebrew Bible) and the New Testament. You can also study the biblical languages – classical Hebrew and New Testament Greek – to an advanced level. The department welcomes all students, irrespective of religious background.

Core papers at 100-level are:

BIBS 112 Interpreting the Old Testament

The interpretation of the Old Testament in its historical context, including an introduction to methods of study, the interpretation of the Pentateuch (Genesis – Deuteronomy) and the historical Books (Joshua – 2 Kings), and an in-depth discussion of selected texts.



# Biochemistry

"Studying Biochemistry at Otago was great - staff were enthusiastic and willing to take time out to talk, and the labs and courses were really wellorganised using handson techniques, with demonstrators ready to help out. While I didn't have any specific training in either dairy or product development, the diverse and interesting subject range of biochemistry set me up well for my current job at Westland Milk Products."

## Stephen Clarke

Bachelor of Science with Honours (Biochemistry) Doctor of Philosophy

Senior Scientist, Westland Milk Products

BIBS 121 Interpreting the New Testament

The interpretation of the New Testament in its historical context, including an introduction to critical methods and to the study of the Gospels and the Epistles, with an in-depth discussion of selected texts.

Both papers are required for a BTheol degree and for a BA or BASc in Biblical Studies.

Papers in New Testament Greek are:

BIBS 131 Introductory New Testament Greek Language 1

A paper for beginners covering the basic elements of New Testament Greek grammar and vocabulary, designed to develop reading skills in New Testament Greek.

BIBS 132 Introductory New Testament Greek Language 2

A continuation of BIBS 131, including the exegesis of passages from the Greek New Testament.

Papers in Classical Hebrew are:

HEBR 131 Introductory Biblical Hebrew 1

A paper for beginners covering the basics of Biblical Hebrew grammar and vocabulary, to enable you to read the Hebrew Bible in the original.

HEBR 132 Introductory Biblical Hebrew 2 A continuation of HEBR 131, including the exegesis of selected passages from the Hebrew Bible.

## Career opportunities

Graduates work in a wide range of roles. Many of these are church-related, but our students are also found in teaching, social work, policy analysis, journalism, librarianship and administration.

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# **Biochemistry**

Te Tari Matū Koiora – The Department of Biochemistry. "Matū koiora" translates as "the quintessence of life". This beautifully captures what biochemists do – explain life in terms of the fundamental building blocks. While watching a living organism,

if you've ever asked yourself "I wonder how ....?", then Biochemistry is for you. In this discipline, you will learn how organisms read the information in their genes, and what happens when things go wrong and people get sick. As a biochemist, you'll answer these questions by understanding the functions of, and interactions between, the biological molecules that make up all living things – DNA, proteins, sugars and fats. And because the building blocks are essentially the same for micro-organisms, plants and animals, whichever area of biology interests you, you can discover how it works through Biochemistry.

## Career opportunities

A degree in Biochemistry equips you with the skills for many varied careers, including opportunities in biotechnology, bioinformatics, industry and the whole range of entrepreneurial activities. Recent Biochemistry graduates have jobs that include wine maker, medical writer, publishing manager, business consultant, information analyst, scientific adviser, portfolio manager, policy analyst, biomedical scientist, forensic scientist, and even a diplomat at Foreign Affairs and Trade.

Other graduates hold key research positions at universities, Crown Research Institutes and with major private companies in New Zealand and overseas. Some are secondary and tertiary teachers, while others have become patent lawyers. With a Biochemistry degree you will go places!

## 100-level papers

To major in Biochemistry (BSc), you need to take these 100-level papers:

BIOC 192 Foundations of Biochemistry
CELS 191 Cell and Molecular Biology
CHEM 191 The Chemical Basis of Biology
and Human Health

and at least one of

BIOL 112 Animal Biology

BIOL 123 Plants: How They Shape the

World

HUBS 191 Human Body Systems 1HUBS 192 Human Body Systems 2

Our first-year paper, BIOC 192, emphasises the structure and function of proteins, how the body uses energy, and the metabolic processes associated with health and disease. This paper is compulsory for all Health Sciences First Year students. You should also take it if you intend to major (or minor) in Biochemistry or are interested in other biological sciences.

## 200-level and beyond

As a major, at 200-level you will examine biochemistry in more depth, and begin to focus on interesting areas like protein structure and function, replication and manipulation of DNA and RNA, and cellular metabolism. You will take these papers if you major (or minor) in Biochemistry and may take them to fulfil degree requirements in other biological sciences. You can also learn the biochemistry of specialised topics in Genetics, Plant Biotechnology and Forensic Science papers at the 200- and 300-level.

At 300-level you will master both laboratory experiments and computer analysis of bioinformatics. You will explore current research questions, focus on experimental design and analysis, and prepare for your career by discussing the practice of science in New Zealand and internationally. With your foundation in Biochemistry at Otago, you can go anywhere!

## **Bioethics**

Bioethics gives you a set of tools for identifying and thinking through moral issues that arise in the health and life sciences. These sciences aim to understand and manipulate humans, animals and the environment, raising many important ethical questions for scientists and non-scientists alike. Bioethics teaches you how to reason about these moral problems clearly and critically, to arrive at conclusions about what is at stake and what

ought to be done about it, with implications for science and society. Bioethics teaching encourages thought, discussion and refining of ideas.

## Career opportunities

Bioethics will distinguish and add value to your degree if you're considering a career in life or health sciences, health law, management or education, or health, science, or environmental policy.

## Papers at 200-level and beyond

Undergraduate papers for 2017 in Bioethics are: BITC 201 Bioethics and the Life Sciences; BITC 202 Animal Ethics; and BITC 301 Bioethics. These papers can be taken alongside study in many other subject areas in all Divisions. In addition, BITC 301 is included in the schedule for the History and Philosophy of Science minor subject.

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# **Biology**

Biology studies living organisms and is the basis of all studies in the life sciences. At the University of Otago, Biology is used as a name for courses at 100-level only. There is no Department of Biology.

#### Career opportunities

There are opportunities in agriculture, forestry and horticulture, as well as conservation and resource management. Students who have studied Biology can obtain positions such as research scientist, university lecturer, school teacher, forest ecologist, science technician, ecological consultant, Ministry for Primary Industries biosecurity officer, resource management co-ordinator, water quality scientist, local government environmental officer, biotechnologist, plant pathologist and marine botanist.

The foundation paper in most biological subjects is:
CELS 191 Cell and Molecular Biology

Progression to 200-level requires one or more of the following additional first-year papers:

	BIOL 112	Animal Biology
	BIOL 123	Plants: How They Shape the World
	ECOL 111	Ecology and Conservation of Diversity
	HUBS 191	Human Body Systems 1
	HUBS 192	Human Body Systems 2
Requirements vary from subject to subject. Refer to the relevant subject entries.		

Note: Students interested in BIOL 112, BIOL 123, HUBS 191 or HUBS 192 are recommended to take CELS 191.

CELS 191 Cell and Molecular Biology

Introduces cell structure and function, molecular biology, genetics and the biology of micro-organisms.

BIOL 112 Animal Biology

Introduces animal diversity, the variation in the structure and life processes of animals and their interactions, and the threats to New Zealand's unique animals posed by introduced animals, human activities and harvesting.

BIOL 123 Plants: How They Shape the World

An introduction to botany, how the study of plants aids our understanding of Earth's history and human society, and how plants will respond to our changing world.

HUBS 191 Human Body Systems 1
HUBS 192 Human Body Systems 2
Introduces the structure and functions of selected systems of the human body with clinical examples for an understanding of health and disease.

ECOL 111 Ecology and Conservation of Diversity

Examines species and population ecology, including the patterns of biodiversity, management of threatened species, evolution and environmental influences, and how individuals interact with each other in populations and with their physical environment.

## 200-level and beyond

200- and 300-level courses in specialised life sciences include: Anatomy, Biochemistry, Botany, Ecology, Genetics, Human Nutrition, Marine Science, Microbiology, Plant Biotechnology, Physiology and Zoology.

## **Biomedical Sciences**

The Bachelor of Biomedical Sciences degree is a multidisciplinary programme of study relevant to understanding the scientific basis of human health and disease. You will choose diverse papers from Anatomy, Biochemistry, Genetics, Microbiology, Nutrition, Pathology, Pharmacology and Physiology.

You can choose from six different majors that each provide research-informed training in areas of biomedical sciences where Otago has significant strengths.

## Career opportunities

As a BBiomedSc graduate you'll be well placed to work in a range of biotechnology and health-related fields. You may find yourself working as a medical specialist, a research scientist, a clinical embryologist, or as a cardiac physiologist. Biomedical Sciences is a flexible and very marketable degree. Our graduates are able to quickly adapt to changing workplace demands and are found in diverse specialties across the range of biomedical sciences.

BBiomedSc provides an excellent pathway into graduate-entry health science programmes including Audiology, Medicine, Nursing, Optometry, Pharmacy, Dentistry and Physiotherapy.

It also provides a gateway to MSc and PhD studies if you wish to become a professional scientist. You'll find Otago BBiomedSc graduates working in universities and research institutes all over the world, from Dunedin to Doha, Sydney to Stockholm.

## 100-level papers

**BIOC 192** 

In your first year of study you must take the following 100-level papers:

Foundations of Biochemistry

CELS 191	Cell and Molecular Biology
CHEM 191	The Chemical Basis of Biology and Human Health
HUBS 191	Human Body Systems 1
HUBS 192	Human Body Systems 2
PHSI 191	Biological Physics

and one further paper at 100-level from any degree schedule.

## 200-level and beyond

From second year you can choose from six majors.

These are:

#### Drugs and Human Health

In this major you will learn how the use and abuse of drugs play a major role in human health. You'll join the search for new therapeutic agents utilising new technologies in pharmacology, biochemistry and immunology. You'll gain an up-to-date overview of the role of drugs in human health and will be well placed to join DRHH graduates who are now working as sleep medicine technologists, in product development for science commercialisation companies, as pharmacists and research scientists.

## Functional Human Biology

Human health depends on the normal functioning of the cells, tissues and organ systems of the body. To understand disease, you must learn about the effects of pathological processes on these systems. With its focus on how the body works, this major is a great choice if you wish to pursue a health-related career. Many FUHB graduates are now working as doctors, dentists, audiologists and optometrists. Others are pushing the boundaries in scientific discovery in an attempt to find cures for Parkinson's disease, inflammatory bowel disease, cancer, etc.

## Infection and Immunity

Are you interested in the study of infectious diseases, the development of new antibiotics or the control of microbial diseases? Would you like to explore the role of the immune system in infection, cancer and inflammatory diseases? Then this is the major for you. It could lead to a career in disease control or to a job as a process microbiologist. One thing is for certain – this major will provide you with effective skills in the fight against increased antibiotic resistance and the threat of pandemics.

#### Molecular Basis of Health and Disease

In this major you'll explore the molecular and pathological basis of health and disease and investigate how altered metabolic events can result in cardiovascular disease, cancer, diabetes and obesity. You will learn about the regulation of cell metabolism and how changes in cellular function can lead to pathological disease. Your future career might be in clinical research, medicine, or as a health officer in Papua New Guinea!

#### Nutrition and Metabolism in Human Health

In this major you'll learn how the physiology and biochemistry of nutrition, dietary assessment, and nutrition is relevant to human health. You will study protein and amino acid requirements, assessment of nutrient status, energy requirements and balance, and the role of lipids and carbohydrates in metabolic disorders. You might then apply this knowledge in your future career as a doctor or lecturer in human nutrition!

## Reproduction, Genetics and Development

This is a popular major for students interested in a career in nursing, midwifery or clinical embryology. It focuses on understanding the interplay between genes and structure in reproductive and developmental processes. You will explore subcellular structures and genetic organisation through to the study of the gross anatomy of reproductive systems, and the processes by which a fertilised egg is transformed into a whole organism.

# **Botany**

Botany is the study of plants: their structure and development, physiology, genetics and biochemistry, health and disease, relationships with other organisms and the environment as well as the impacts plants have on our daily lives.

At the University of Otago, the emphasis is on general biology, ecology and physiology of vascular plants, marine algae, phytoplankton, cyanobacteria and fungi, although other groups (plant viruses, lichens, mosses and liverworts) are included in some papers.

## Career opportunities

There is a wide range of employment opportunities for graduates in Botany: these jobs can cover research scientists, university lecturers, school teachers, forest ecologists, science technicians, ecological consultants, biosecurity officers, resource management co-ordinators, water quality scientists, local government environmental officers, biotechnologists, geneticists, plant pathologists and marine botanists.

## 100-level papers

At first year you must take a number of required papers and several others are highly recommended. Please refer to the *Guide to Enrolment* for further details.

## 200-level and beyond

200-level papers examine a range of subject areas including plant functional biology and biotechnology, plant and fungal diversity including global and Southern Hemisphere affinities; and marine and freshwater primary production – particularly the biology, ecology and physiology of seaweeds, cyanobacteria and phytoplankton.

300-level papers consider a range of subject areas including community, population and evolutionary plant ecology, as well as the physiological responses of plants, algae and phytoplankton to terrestrial and aquatic environments, the biology and ecology of plant interactions with animals and microbes.

## **Business**

There is no single subject called Business. Refer to the major subjects of Accounting, Economics, Finance, Human Resource Management, Information Science, International Business, Management, Marketing Management, and Tourism. All subjects taught in the Business School can be put towards a BCom. In addition, you can undertake a minor in all of these areas except International Business. Hospitality and Entrepreneurship are offered as specialist minors only.

To complete a Bachelor of Commerce (BCom), you must complete, in addition to your major's requirements, a set of "core" papers that provide an excellent general understanding of business. To view all core paper requirements visit otago.ac.nz/courses/qualifications/bcom.html

Academic advisers are available throughout the year to help you organise your study programme.



# Chemistry

An understanding of chemistry provides a foundation for biology, earth, ocean, atmospheric, food and material sciences and others as well as chemical science. It covers the properties, syntheses and transformations of substances and their applications to the way we live and modify our environment. Through chemistry, we can begin to understand the material and biological world.

## Career opportunities

There continues to be strong demand for Chemistry graduates. Graduates work both in New Zealand and overseas in academic,

commercial and research positions in the chemical, plastics, pharmaceutical, food, textile, timber, pulp and paper, and electrical industries, and in plant and product control and management. Chemists play leading roles in agriculture, horticulture, fisheries, water-quality control, chemical, biochemical and medical research units, in the legal profession and in state-owned enterprises. There is an ongoing shortage of Chemistry graduates in the teaching profession and numerous opportunities for chemists in the commercial environment. For such careers additional commerce papers or double degrees in Chemistry, Law or Commerce can be a distinct advantage.

## 100-level papers

If you intend to major in Chemistry (BSc or BASc), you must take papers worth at least 90 points (5 papers) from 100- and 200-level Chemistry papers.

Both CHEM 111 and CHEM 191 are strongly recommended. Study of Mathematics and/or Physics at 100-level, or at least to NCEA Level 3, is also recommended if you plan to advance in Chemistry.

# CHEM 111 Chemistry: Molecular Architecture

Emphasises interactions between atoms and molecules and includes modern methods to determine molecular structure and shape. Explores the relationship between molecular interactions and the properties of materials.

#### CHEM 191 The Chemical Basis of Biology and Human Health

An introduction to the concepts of Chemistry underlying important processes in biology and human health, including energetics, kinetics, equilibria and solubility, properties of water and solutions, acids, bases, complexation and electron transfer, reactions of organic molecules, amino acids and carbohydrates. It is a compulsory paper for Health Sciences First Year students.

Both CHEM 111 and 191 cover the theoretical, quantitative and practical aspects of chemistry. At least 14 credits in



# Chemistry

"I studied chemistry because I loved the idea that I might create something new and that my work might help people someday. Otago's fantastic facilities were instrumental in helping me conduct my research, and my PhD supervisor was incredibly supportive and encouraging, ensuring that I produced the high-quality publications that helped me get my current job in the UK, and that will be important as I prepare to take my career to the next level."

## James Lewis

Bachelor of Science with Honours (Chemistry) Doctor of Philosophy

Postdoctoral Research Fellow, University of Southampton, UK

NCEA Level 3 Chemistry Achievement Standards are strongly recommended as an appropriate background for these papers.

## 200-level and beyond

The Department of Chemistry offers BSc courses in Chemistry. These courses are flexible and cater for wide interests such as biological, marine, environmental, physical, forensic, analytical and synthetic (organic and inorganic) chemistry. Chemistry also offers or contributes to postgraduate courses specialising in chemical hazard and risk mitigation and biotechnology, marine and environmental science. Students who would like to study more advanced Chemistry, but not necessarily to major in the subject, can still do so.

# **Introductory Chemistry**

Students who have not done Year 13 Chemistry (or equivalent), or feel their background in Chemistry is weak, can enrol for the Introductory Chemistry catch-up course. This is a distance-taught, non-credit course that runs throughout the year.

For further information including enrolment details for the course visit: neon.otago.ac.nz/chemistry/studying/IntroChem/

# CHEM 150 Concepts in Chemistry (Summer School)

This bridging paper provides an introduction to the key concepts of chemistry and is designed for students who have a limited background in chemistry or who feel they need a catch-up before enrolling for 100-level chemistry courses (CHEM 111 or CHEM 191) or to provide an understanding of basic chemistry concepts to complement their current studies. The content of the course is at senior high school Chemistry level (NCEA Levels 2 and 3).

The course will run for six weeks. The first four weeks will be distance taught, with students completing lessons that will be taught online. The final two weeks will be taught in the Department of Chemistry and will involve lectures/tutorials and laboratory classes.

Assessment will be by means of online tests and laboratory exit tests, as well as a final examination.

The course is normally restricted to students who have attained no more than 14 credits at NCEA Level 2 Chemistry (or equivalent). Enquiries regarding course eligibility should be directed to the course co-ordinator, Dr David McMorran (davidm@chemistry.otago.ac.nz).

For more information see neon.otago.ac.nz/chemistry/studying/CHEM150

## Chinese

Modern Standard Chinese is the most widely spoken language in the world. As China is becoming increasingly important to New Zealand's future, it is crucial that we know more about Chinese culture, history, politics and economy. Learning the Chinese language is an essential first step towards this understanding.

## Career opportunities

There is a definite need for people who understand Chinese culture and who can communicate effectively with Chinese speakers. Our graduates work in New Zealand and overseas in business, law, tourism, information science and technology, teaching, translation and interpreting, print and electronic journalism, and government departments.

#### Studying Chinese

At Otago, you can study Chinese at any level. Chinese is a major of the Bachelor of Arts. You can also complete a minor or a Diploma in Chinese Language while completing your degree in a different major.

## 100-level papers

If you have no previous knowledge of Chinese and intend to major in Chinese (BA),\* you need to enrol in the following 100-level papers:

CHIN 131 Introductory Chinese 1

Introduces reading, writing, listening and speaking Chinese. This course is for absolute beginners.

CHIN 132 Introductory Chinese 2

Building on CHIN 131, this is an elementary course in reading, writing, listening and speaking for students with some basic Chinese.

Students then choose either ASIA 101 or GLBL 101.

ASIA 101 Introducing Asia

Kung Fu? Sushi? Gangnam Style? Bollywood? Gandhi? Mao Zedong? Pokemon?

What do we really know about Asia? This multidisciplinary course develops students' knowledge and understanding of the Asian region, society, people and cultures.

GLBL 101 Introduction to Intercultural Communication

Understanding communication across cultures: communication styles, interpersonal relationships and intercultural competency.

\*If you already have some proficiency in Chinese (e.g. have studied it at secondary school, lived in China, or have been exposed to Chinese in a family setting), you should seek special permission to enrol in 200-level language acquisition papers.

## 200-level and beyond

Our Chinese language acquisition papers at intermediate level (CHIN 231 and CHIN 232) and advanced level (CHIN 334, CHIN 335, CHIN 441) are designed to develop communication skills in spoken and written Chinese, as well as increase knowledge of Chinese culture and society. The Chinese Programme also offers culture papers taught in English. Students

may also include Asian Studies and Global Cultures papers in their major. BA(Hons) and the postgraduate qualifications MA, PGDip and PhD are also available.

The University of Otago has established student exchange programmes with prestigious universities in Beijing, Dalian, Hong Kong, Shanghai and Taiwan where our students may spend one or two semesters and complete courses that count towards their Otago degree. There are also many scholarships (such as the NZ-China scholarship, the Shanghai Summer School, the Tertiary Summer Camp in Fudan) available for students who wish to deepen their knowledge of Chinese language and culture.

# Christian Thought and History

Christianity has been a hugely influential force in the development of Western civilisation, helping to shape the world in which we live today. It continues to have a very significant global presence. Christian Thought and History explores the history, beliefs and values of Christianity – their origins, development and varying contexts.

#### Career opportunities

Graduates develop valuable skills in critical thinking, research and communication. They go on to develop careers in any number of roles: teaching, social work, journalism, librarianship, administration, aid and development agencies, government department work, and church leadership and ministry.

There are three main dimensions to Christian Thought and History:

- Church History the growth and development of the Christian faith from the first century to the present day
- Systematic Theology a critical exposition of the content of Christian belief, both historically and in contemporary contexts.

- Papers explore the nature and implications of Christian understandings of God, Jesus, humanity, salvation, the natural world, community and worship
- Christian Ethics and Public Theology

   link the history and ideas of Christian
   belief to present-day questions about life, death, relationships, suffering, violence, war, poverty and justice. Some papers pay special attention to the particular contributions Christian theology may make to issues of major political and social debate in a pluralist society.

Core papers at 100-level are:

CHTH 102 The History of Christianity

A survey of the history of Christianity from around 100 AD to the present day: from early formation to recent contexts in Nazi Germany, Soviet Russia and North America.

CHTH 111 Doing Theology

What is theology? How should it be done, and why? The roles of Scripture, tradition and experience; exploring doctrines of God, creation and humankind in a pluralist world.

CHTH 131 God and Ethics in the Modern World

An introduction to Christian ethics in the modern world, with particular attention to the major cultural shifts that have shaped contemporary thinking about society, God and ethics.

All three of these papers are compulsory in the BTheol degree; for a BA or BASc major in Christian Thought and History, you need to take CHTH 102 and either CHTH 111 or CHTH 131.

## **Classics**

Classics is the study of the civilisations of ancient Greece and Rome. These have had immense influence on the development of Western civilisation. Our language, literature, art and architecture, drama, philosophy, political and legal systems are all derived from Greece and Rome.

Greece and Rome are fascinating subjects in themselves, and our interdisciplinary papers mean there are links with almost all other Arts subjects. The major in Classics covers Classical Studies, Greek and Latin, which can be combined in proportions to suit you.

Classical Studies covers history, literature, mythology and archaeology (taught in English translation), while Greek and Latin papers offer linguistic training and the experience of reading major works of ancient Greek and Roman literature, drama, history and philosophy in the original languages. A knowledge of ancient Greek and/or Latin is an essential skill required for postgraduate work in Classics.

## Career opportunities

Graduates teach in schools and universities, and work in foreign affairs, trade and industry, university administration, libraries, art galleries, museums, theatre and journalism.

#### 100-level papers

If you intend to major in Classics (BA or BASc), you must take at least two of the following 100-level papers:

CLAS 105	Greek Mythology
CLAS 108	Classical Art and Archaeology: C Heroes, Gods and Men
CLAS 109	Roman Social History: Slaves, Gladiators, Prostitutes
GREK 111	Introductory Greek 1
GREK 112	Introductory Greek 2
LATN 111	Introductory Latin 1
LATN 112	Introductory Latin 2

The ideal would be to take four papers, combining Classical Studies with one of the languages, or combining Greek with Latin.

## CLAS 105 Greek Mythology

A study of the myths of Ancient Greece with particular reference to the origins and nature of gods and heroes.

CLAS 108 Classical Art and Archaeology: Of Heroes, Gods and Men

An introductory study of Classical art and archaeology, examining both the ancient Greek and Roman worlds.

CLAS 109 Roman Social History: Slaves, Gladiators. Prostitutes

A study of ancient Roman social life, with particular emphasis on the marginalised (or so-called "invisible") lower classes, including slaves, gladiators, prostitutes and bandits.

## GREK 111 Introductory Greek 1

A reading-based beginners' paper covering the basic elements of ancient Greek grammar and vocabulary, designed to develop reading skills in ancient Greek.

#### GREK 112 Introductory Greek 2

A continuation of GREK 111, incorporating more advanced grammar and syntax and designed to develop reading skills in ancient Greek.

### LATN 111 Introductory Latin 1

A reading-based beginners' paper covering the basic elements of Latin grammar and vocabulary and designed to develop reading skills in Latin.

#### LATN 112 Introductory Latin 2

A continuation of LATN 111, incorporating more advanced grammar and syntax and designed to develop reading skills in Latin. If you have at least 18 credits in NCEA Level 2 Latin (or equivalent), you may enrol for this paper without taking LATN 111.

## 200-level and beyond

#### Classical Studies

Our papers cover Greek and Roman myth, Greek philosophy, Roman archaeology, Alexander the Great and his successors, Athenian social life and religion, Roman emperors, and Cicero's oratory. There is also a specialised paper introducing students to Research Methods in Classics.

#### Greek and Latin

Greek and Latin papers focus on improving language skills and reading major texts. If you have at least 16 credits in NCEA Level 3 Latin (or equivalent), you may be admitted directly to LATN 211.

# Clothing and Textile Sciences

Clothing and materials (such as textiles, leather and polymers) are used to meet basic human needs, and are essential contributors to product and human performance, influencing feelings of well-being in both the physical (e.g. for protection) and the cultural senses (e.g. preservation of artefacts). At Otago clothing, textiles and materials are studied from physical, biological and cultural perspectives. Study includes learning about structural features of fibres, yarns, fabrics and products, and examining how these affect the properties and performance of the products in which they are used, along with evidence of their uses (e.g. as medical products, forensic evidence, evidence of cultural change) and examination of contemporary technologies.

## Career opportunities

A Clothing and Textile Sciences major or minor can enhance any degree and leads to careers in textile and apparel manufacturing, marketing and sales (e.g. technical specification, quality control, performance assessment, production management), service organisations (e.g. NZ Police, NZ Defence), in teaching (e.g. primary through to tertiary levels),

research (e.g. Crown Research Institutes, government departments) and in cultural institutions (e.g. museums and art galleries, as managers of textile collections, or as curators).

Complementary subjects from Sciences (in particular), as well as Commerce and Humanities, can enhance career prospects: for example, for a major (or minor) in Clothing and Textile Sciences supporting papers include Human Physiology, Chemistry, Physics, Archaeology, Anthropology, Marketing. Papers in Clothing and Textile Sciences may also support study of other subjects.

## 100-level papers

There are no 100-level papers and no specific prerequisites. However, some papers are recommended and ideally proposed 100-level papers should be discussed with an academic adviser in Clothing and Textile Sciences.

Entry into Clothing and Textile Sciences papers is possible as early as the second semester of the first year of study, as 36 points is required for entry into 200-level papers.

## 200-level and beyond

Theory, principles, practices and selected applications are examined at 200-level and beyond. Materials in Human Performance, for instance, includes analysis of the physical structure of materials and various products used in sport, and the way in which they function to identify the wearer, to enhance human performance and/or to prevent or minimise injury. For detail about each of the papers on offer go to otago.nz/materials/study/undergraduate/index.html

Courses in Clothing and Textile Sciences are accredited by The Textile Institute, the international organisation that monitors professional qualifications in textiles, footwear and clothing. Graduates with 54 points at 200-level and 72 points at 300-level in Clothing and Textile Sciences are eligible for the CText LTI qualification

after one year's relevant employment. This professional qualification opens doors for clothing and textile sciences alumni internationally.

## **Commerce**

There is no single subject called Commerce. Refer to the major subjects of Accounting, Economics, Finance, Human Resource Management, Information Science, International Business, Management, Marketing Management, and Tourism. All subjects taught in the Business School can be put towards a BCom. In addition, you can undertake a minor in all of these areas except International Business. Hospitality and Entrepreneurship are offered as specialist minors only.

To complete a Bachelor of Commerce (BCom), you must complete, in addition to your major's requirements, a set of "core" papers that provide an excellent general understanding of business. To view all core paper requirements visit otago.ac.nz/courses/qualifications/bcom.html

Academic advisers are available throughout the year to help you organise your study programme.

## **Communication Studies**

Communication Studies focuses on the social, technological, political and cultural implications of current and changing communicative practices and networks. With an emphasis on social and mediabased communication, courses initiate a critical and creative understanding of digital, broadcast, print, mobile and everyday communication. Papers also develop skills in written work, data analysis, research and oral presentations.

Students can also study Communication Studies as a minor to enhance their undergraduate majors. Many MFCO Film and Media papers also count towards the COMS major.

## Career opportunities

Communication Studies is a major that recognises the need for graduates who understand communication in the information age and the era of globalised media. The skills that students learn are widely applicable to a broad range of occupations and professions. Our graduates work as journalists (TV, radio, print), teachers, administrators, managers, communications and marketing coordinators, registrars and policy-makers and in the public service sector (Tertiary Education Commission, Department of Internal Affairs). Others are employed in private creative and media industries.

## 100-level papers

COMS majors must take:

MFCO 102	Understanding Contemporary Media
and	
MFCO 103	Introduction to Communication Studies
MFCO 102	Understanding Contemporary Media

Introduces students to both the historical framework of media studies and the contemporary discourses that define the discipline. Engages with theories of representation and develops valuable skills for analysing media texts. These skills include semiotics, discourse analysis, ideology critique, and postmodernism.

MFCO 103 Introduction to Communication Studies

Introduces students to the core critical theories, ideas, concepts and debates at the heart of communication research. Gives a grounding in issues in communication theory, mass communication, audience studies, digital communication and the communication industries. Students will also develop their own skills in writing and reflecting critically about communication studies.

Please check the department website otago.ac.nz/mfco for the most recent paper information.

## 200-level and beyond

Beyond 100-level, papers provide perspectives on media theories, communications history, technology, policy and audiences, important social, political, environmental and cultural issues involving media.

## Combine with other subjects

Communication Studies can be combined with the study of a wide range of other subjects, including Film and Media, English, Anthropology, Political Studies, Geography, History and Art History, Gender, Languages and Marketing.

# **Computational Modelling**

Science, technology, engineering and mathematics (STEM) skills are the backbone of a modern economy. A computational modeller bridges the gap between mathematics and the other STEM disciplines. When industrial scientists want to use mathematics and computing to solve a problem, they need computational modelling.

A computational modeller studies real-life problems and processes and then distils the key features into mathematical equations to construct a model. A well-designed model is the key to a successful outcome, while a badly designed model will make any mathematical solution worthless. It is no wonder that skilled computational modellers are in high demand. We are fortunate to have some of the top mathematical and computational modellers at the University of Otago.

The COMO programme will help you develop the skills for successful computational modelling. Many students take COMO courses as part of a degree in another discipline; others specialise in computational modelling itself.

If you are interested in Computational Modelling, contact the programme director Professor David Bryant (como@maths.otago.ac.nz)

#### COMO 101 Computational Mathematics

This is a general purpose paper providing a general introduction to techniques in computational modelling and applied mathematics. Applications range from estimation of tidal power output to epidemiology and genetics. It has no prerequisites, and is recommended for science and health science majors.

#### COMO 204 Differential Equations

This paper provides a comprehensive introduction to the theory and practice of differential equations, one of the most fundamental tools for computational and mathematical modelling.

Prerequisite: MATH 170

#### COMO 303 Numerical Methods

This paper presents key techniques and theory required to carry out mathematical and modelling calculations on a computer. It discusses methods for estimating parameters from data, approximating functions and surfaces, and develops further ideas from COMO 204 on numerical methods for working with differential equations.

Prerequisites: COMO 204 (or MATH 262), MATH 202

# **Computer Science**

Computer Science is an exciting subject, especially since computers are more important in our modern world than ever before. In various forms, from smart technology, through phones, tablets and laptops, to supercomputers, they are essential to how we all work, play and communicate. Programming is a fundamental part of computer science, but computer scientists are not just programmers.

The subject also includes: problem-solving, manipulating data, building networks, creating computer graphics, using artificial intelligence systems, designing games and web development. In Computer Science

you can learn about all of these and more. Computer Science can be taken as a major for either a Bachelor of Arts (BA), Bachelor of Arts and Science (BASc) or a Bachelor of Science (BSc), as a second major for a Bachelor of Applied Science (BAppSc), as a minor for BA, BPA, BSc, BASc, BAppSc, BTheol, BCom, or as an elective.

## Career opportunities

This is a good time to think of an IT career. Over the past few years, the number of jobs has continued to increase steadily while the number of skilled graduates has lagged behind. A career in the IT sector offers good salaries and job security. It also offers a lot of variety, since computer skills can be combined with any other interests you have. On our web pages you can see what a wide range of positions our graduates have had, including programmer, software engineer, systems analyst, system administrator, web software developer, database administrator, animator, games designer, researcher and robotics expert.

100-level papers offered by Computer Science:

# COMP 112 Web Development and Digital Media

This popular paper builds practical skills in creating web pages using HTML and CSS, as well as some Javascript and PHP. There is no prerequisite, but we assume you are comfortable with using a computer, for example to send email or do word-processing.

## COMP 150 Practical Programming

This paper provides a gentle and down-toearth introduction to programming, using the increasingly popular language Python. Students who do not intend to major in Computer Science can get a taste of what computing is about, while students who do intend to major in Computer Science will find this paper very good preparation.

## COMP 160 General Programming

This paper introduces the important idea of object-oriented programming, using the Java language. For students who intend to major in Computer Science, COMP 160 is the key starting point, as all 200-level COSC papers rely on it. Although this paper itself has no formal prerequisite, COMP 150 provides very useful preparation.

Students who major in Computer Science are required to include three 100-level papers offered by other departments, and should discuss with the departmental adviser the best time to include each paper.

The Department of Information Science offers:

COMP 101 Foundations of Information Systems

 $The\ Department\ of\ English\ and\ Linguistics\ offers:$ 

ENGL 127 Effective Writing

Finally, there is a flexible choice between mathematically-flavoured papers offered by several departments, for example MATH 160 or STAT 110 or BSNS 112.

## 200-level and beyond

The backbone of Computer Science is programming, and the papers COSC 241 and COSC 242 build on the programming skills of COMP 160. In COSC 243 students are introduced to the way a computer works, so that they will be able to cope with unfamiliar environments (for example, a new operating system). In COSC 244 students are introduced to computer networks, including the internet. COSC 212 focuses on programming techniques for creating dynamic web pages.

At 300-level, COSC 326 continues the programming theme. This is a completely practical paper with no final exam. The other papers each represent a specialised skill cluster. Students would normally discuss their selection of papers with the Adviser of Studies to ensure that the papers most relevant for their careers are included.

Computer Science combines well with many other studies including: biological and health sciences leading to careers in bioinformatics. It also strengthens careers in maths, physics, economics and finance. Students intending to work in business might combine Computer Science with Information Science, Marketing, Accounting or Finance as part of a BCom.

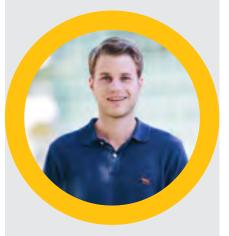
# **Computing**

The University of Otago offers four computing-related subjects: Computational Modelling (BAppSc), Computer Science (BA, BSc, BASc or as a second major for BAppSc), Information Science (available in BA, BCom, BASc, BSc or as a second major for BAppSc) and Software Engineering (BAppSc). You can read about each of these elsewhere in this subject guide.

You can take a first-year course that will allow you to develop majors in any of these computing subjects. You can decide at the end of your first year which one you want as your major. It is recommended that you consult an adviser of studies in your major subject department in order to select your first-year papers appropriately.

## **Consumer Food Science**

Consumer Food Science involves the study of factors that influence our food choices and food production, for example cultural and ethical issues, sensory perception (taste, appearance, smell), food quality, policy, consumer behaviours, diet, nutrition, lifestyle and marketing influences. This area of study provides an opportunity to combine courses in the consumer aspects of food science, with business skills through a compulsory minor (or second major). Consumer Food Science is complemented very well by a minor (or second major) in Marketing and this is a popular choice with employers. It also works well with subjects such as Management or Entrepreneurship. Combining Consumer Food Science with Nutrition Communication is another choice that opens different career options. A range of combinations is available depending on your interests.



# Computer Science

"I was studying neuroscience and knew that I wanted to move into artificial intelligence so I picked up extra papers and completed a Diploma for Graduates in computer science, which gave me a really strong background in artificial intelligence principles. I've since gone on to complete an internship at Weta Digital and I'm now working as an entrepreneur in the UK. Combining neuroscience and computer science has really brought a lot of benefits."

## Jordan Campbell

Bachelor of Science with Honours (Neuroscience)
Diploma for Graduates (Computer Science)
Doctor of Philosophy candidate

Tech entrepreneur

Graduates are employed in careers as diverse as food promotion, sensory analysis, food quality management, marketing, consumer research, food regulation and policy, and new product development.

## 100-level papers

If you intend to major in Consumer Food Science (BAppSc), you must take the following 100-level papers:

FOSC 111 Food Principles
FOSC 112 Introduction to Food Marketing
either

STAT 110 Statistical Methods

or

STAT 115 Introduction to Biostatistics CELS 191 Cell and Molecular Biology is also recommended.

You will also need to select additional papers required for your chosen minor or second major subject.

#### 200-level and beyond

Three core food science papers, which build your foundation knowledge of the science of food, are taken in second year: Food Systems 1, Food Systems 2 and Sensory Science. Other papers are selected to fulfil the requirements for your chosen minor or second major and there may still be room to add extra papers relevant to Consumer Food Science, such as Psychology or Statistics.

At 300-level, a full-year paper in Food Product Development will give you valuable experience through a hands-on project, applying all the skills learnt to date. You will also study Advanced Sensory Science and look in more depth at factors affecting consumer choice in Food and Consumers. You will also complete the requirements for your minor or second major.

# Criminology

Criminology is currently one of the fastest growing and most popular areas of study in the social sciences internationally. Students studying criminology have the opportunity to learn about many of the social, cultural, political and economic dynamics that surround the social phenomenon of crime. The minor in Criminology provides the opportunity to study key themes and debates in criminology, including:

- Conceptions of crime, deviance and victimisation in theory and history
- The criminal justice system and alternative forms of justice
- Crime, equality and social difference
- Feminist criminology, gender and crime
- Victimology
- Criminality and victimisation in media, film and literature
- · Forensic investigation of crime.

Students who take the minor in Criminology will find its fascinating learning opportunities combine well within their BA, BSc, BASc, BCom or BAppSc studies. BA students combine the minor with high profile disciplinary majors such as Psychology, Sociology, Gender Studies, Anthropology, Politics, Philosophy, Film and Media Studies, Geography and Classics. Students also combine the minor with majors such as Forensic Analytical Science, Management, Anatomy and Neuroscience.

To fulfil the requirements of a minor in Criminology students must take both of:

SOCI 103 Crime, Deviance and Social Transformation

CRIM 201 Crime, Justice and Society

The rest of the minor is made up of three choices from a range of approved papers in Psychology, Gender Studies, Politics, History, Anthropology, Film and Media Studies, Law.



# **Dental Technology**

A dental technician makes a wide range of dental appliances. The three-year Bachelor of Dental Technology degree (BDentTech) enables you to acquire the knowledge, understanding and skills to become a competent dental technician and work independently as a member of the dental team. There is also the option to do the Bachelor of Dental Technology with Honours (BDentTech(Hons)), which involves doing additional research-based papers.

## Career opportunities

Once you graduate you can register with the Dental Council of New Zealand and work in many different areas of dental technology. There are opportunities for postgraduate study at the University of Otago, such as the Postgraduate Diploma in Dental Technology and Master of Dental Technology. Dental technicians can have direct clinical contact with patients, following completion of the Postgraduate Diploma in Clinical Dental Technology, providing a service in removable denture prosthetics. Registered clinical dental technicians in New Zealand are also entitled to register in Australia.

## Admission

To be admitted to the course, you should have a minimum of 14 Level 3 NCEA credits in Chemistry and a minimum of 14 Level 3 NCEA credits in Physics, or approved equivalent.

Application is made online through the website otago.ac.nz/healthsciences and must be completed by 15 September of the preceding year. Late applications may be considered. In addition, you must complete University enrolment procedures.

## 100-level papers

If you wish to study for the Bachelor of Dental Technology degree, you must take the following 100-level papers:

DTEC 101	Dental Materials 1
DTEC 102	Dental Technology 1
DTEC 103	Oral Health Sciences for Dental Technology
CHEM 191	The Chemical Basis of Biology and Human Health

**Biological Physics** 

## 200-level and beyond

PHSI 191

200-level papers include dental materials such as ceramics, polymers and metal alloys and the construction of partial dentures, orthodontic appliances and conservative restorations.

300-level includes marketing, practice management, biomaterials research, construction of complex appliances for crown and bridge restorations; implant restorations and dentures.

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# **Dentistry**

You will find that Dentistry is a challenging profession that combines a high degree of manual dexterity and precision, together with an ability to communicate well with a thorough academic understanding of not only the mouth, but also the head and neck region. The skills of a dentist enable you to work as an oral physician, who diagnoses, formulates and carries out treatment that is planned to each individual patient's oral needs.

#### Career opportunities

Dentistry contributes to well-being, general health and appearance. Following graduation, you can join a general dental practice, become a hospital dental house surgeon or work in the defence force. You can also undertake postgraduate study and research for an academic career, or complete postgraduate clinical qualifications before entering specialist practice.

For you to practise dentistry in New Zealand you must be registered as a dentist with the Dental Council (New Zealand). The minimum qualification to do this is the degree of Bachelor of Dental Surgery (BDS) from the University of Otago, which has New Zealand's only Faculty of Dentistry. As a graduate from Otago, you'll have an excellent reputation internationally.

#### Admission

Entry is competitive and admissions regulations provide different categories of entrance (Health Sciences First Year [HSFY], Graduate, and Alternative categories). You should read the appropriate regulations at otago.ac.nz/healthsciences, in the *University Calendar*, and the *Health Sciences First Year Handbook*. There are 60 domestic places available for second-year classes each year, and the majority are admitted from the HSFY Category of Admission.

# Health Sciences First Year category of admission

For you to be eligible for selection into Dentistry via this category, all your Health Sciences First Year papers must be passed with a minimum average of 70% and you cannot have any paper grades less than a B- (65%). If you have reached the academic and current UMAT threshold you will be invited to a Dental Admissions Interview. Following this, if you have met all the criteria, selection to Dentistry is based on your average mark in the Health Sciences First Year papers.

## Graduate category of admission

If you're a graduate and you have completed your first degree at a New Zealand university, you may apply for admission under this category. You must have completed papers equivalent to the HSFY papers, and the average of all papers across the degree must be completed with a minimum of a B (GPA of 5). To apply under this category, you must do so within three years of the completion of

the requirements of your first degree. You must also reach the academic and current UMAT thresholds to be invited to a Dental Admissions Interview. If you meet all three selection criteria your selection will be based on your GPA.

## Alternative category of admission

For you to be considered under this category, you must hold a degree from a New Zealand university, and no longer be eligible under the Graduate category, or have completed a degree at an overseas university to the equivalent of NZQA Level 7, or have a master's and/or PhD qualification. You must have passed the equivalent of the papers prescribed for the Health Sciences First Year course, and have achieved a minimum academic standard to be determined by the Dental Admissions Committee in any papers undertaken at university level (usually a minimum of a B (GPA of 5) (Otago equivalent)). You must also have a current UMAT result that is above a threshold determined annually by the Dental Admissions Committee and have undertaken a Dental Admissions Interview. If you have met these criteria your selection will be based on academic merit and an interview.

If you are Māori or Pacific Islander you may apply in any of the above categories and will be considered separately.

If you have lived, or been educated, in a rural area of New Zealand you may seek admission under the New Zealand Rural Origins sub-category.

Your application must be made to the Health Sciences Admissions Office, Division of Health Sciences, by 15 September in the year before admission.

## International students

If you're an international student you may be offered a place in second-year classes if you are sponsored through the Ministry of Foreign Affairs and Trade, the government of your country of origin or if



# Dentistry

"The training is very hands-on from the get-go, and it is intensive - you are studying, at lectures, or attending clinics from 9-5 most days. It's great preparation for the workforce, which is hugely beneficial for graduate dentists. I've taken up a job at Wellington Hospital as a dental house surgeon and I'm loving it. It's so good to be out doing what you studied so hard for five years!"

# Andrew Lamb Bachelor of Dental Surgery Dental Health Surgeon, Wellington Hospital

you are a full-fee-paying overseas student and you have met the academic, UMAT and interview standards determined by the Admissions Committee. You should contact the International Office, University of Otago, for application details.

## Beyond your first year

Each of the next four years of your five-year BDS programme comprises three papers: The Dentist and the Patient, Biomedical Sciences, and The Dentist and the Community. These three papers continue through the programme with increasing experience in all aspects of clinical dentistry. In your later years, you will also have opportunities to undertake supervised clinical work outside of the Dunedin campus, and to undertake an elective study and complete a research project.

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## **Dietetics**

Dietetics is the profession that works with people to help them improve their health through nutrition. Dietitians plan, communicate, implement and evaluate effective nutritional management strategies based on current scientific evidence. If you are interested in people, food and nutrition, then dietetics is the career for you. There are work opportunities for dietitians in New Zealand and overseas.

The Master of Dietetics (MDiet) programme at Otago is a postgraduate course. To be eligible for entry into the MDiet programme you will need to complete the equivalent of an undergraduate degree majoring in Human Nutrition that includes food service management papers.

## Career opportunities

Career opportunities include: clinical dietetics in hospitals, the community and private practice; foodservice management in hospitals, residential institutions and the wider community; public health nutrition for public health organisations, government and non-government agencies; community nutrition for District Health Boards; the food industry, such as food manufacturers; medical nutritional reps for nutritional pharmaceutical companies; research and education within universities and polytechnics; sports and other consultancies: self-employed, government and non-government agencies.

## Studying Nutrition

It is important to plan early and study science subjects such as Chemistry, Biology and Statistics at secondary school. It is particularly important that you study organic chemistry to the equivalent of NCEA Level 3 (the Department of Chemistry at the University of Otago offers the option of two catch-up Chemistry papers that can be studied prior to commencing a degree in Human Nutrition).

In the first year of the degree, you take papers in Cellular and Human Biology, Chemistry, Biochemistry, Statistics and a Food Science paper. In the second and third years, you study papers that look at the biochemistry and physiological systems of the body as well as how nutrients affect the human body. You also study how to organise and manage foodservice by providing healthy meals to large groups of people.

Those who have a Nutrition degree from another university may need to complete additional papers before applying for entry into the MDiet programme.



# **Ecology**

Ecology is the scientific study of the distribution and abundance of living organisms and their relations with their environments. Ecology courses are taught by staff from a range of departments (e.g. Botany, Marine Science, Philosophy and Zoology).

The diversity of Otago's habitats, ecosystems, plants and animals is reflected in the teaching and research. All Ecology papers have fieldwork components exploring these habitats and the ecological/environmental issues associated with them.

## Career opportunities

Interest in environmental and ecological issues, and public and governmental concern and debate has created a need for scientifically-trained ecologists. Graduates work in a range of fields, including central government institutions such as the Department of Conservation and Ministry for Primary Industries, Crown Research Institutes such as Landcare Research, local and regional councils, private consultancies, tourism operations, secondary and tertiary teaching, and nongovernmental organisations.

## 100-level papers

If you intend to major in Ecology (BSc), you must take a number of specified 100-level papers:

BIOL 112	Animal Biology
BIOL 123	Plants: How They Shape the World
ECOL 111	Ecology and Conservation of Diversity
GEOG 101	Physical Geography
or	
EAOS 111	Earth and Ocean Science

MARI 112 Global Marine Systems STAT 110 Statistical Methods or

STAT 115 Introduction to Biostatistics

Note: Please consult the Ecology Programme Director for further information: ecology@otago.ac.nz

## 200-level and beyond

There are three required papers at 200-level and one at 300-level in Ecology, including a 300-level ecology field course, a data analysis paper and a wide range of ecologically-based papers from various departments.

With appropriate prerequisite papers, students may complete degrees with 100-, 200- and 300-level papers in science, as well as up to 90 points of non-science papers (e.g. Law, Management, Tourism).

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## **Economics**

When you are trying to decide whether to blow your budget and go skiing or stay at home and study, you're using basic principles of economics. Economics is about choice, and is at the heart of decision-making.

Economics can be applied to business, finance, administration, law, local and national government, and, in fact, to most aspects of everyday life. It is not just a subject: it is a way of thinking, and it provides a logical way of looking at a variety of issues of importance to human well-being. Some of these include unemployment, economic growth, inflation, exchange rates, interest rates, international trade, taxes, market power, pricing, poverty, distribution of income and resource allocation in areas such as education, health, business and the environment. At Otago, you'll learn how economics shapes society.

Economics at Otago can be studied as a major within the BCom, BA, BASc or BSc degrees, or as part of the PPE Programme

(Philosophy, Politics, Economics). Note that there are some differences in the requirements of each of these degrees – see the degree entries for details. A major or minor in Economics would complement study in most other subjects in Arts, Commerce and Science.

Graduates work in large industrial and commercial firms and many different branches of the public sector, including the Ministries of Foreign Affairs and Trade, Health, Business, Innovation and Employment, the Reserve Bank, Treasury, Statistics New Zealand, the Department of Internal Affairs, local government and planning authorities, and banks and financial institutions.

Some graduates work with health providers, research bureaux and management consultancies, while others have careers in universities, other tertiary institutions and secondary schools.

## 100-level papers

If you intend to major or minor in Economics, you must take the following 100-level papers:

BSNS 113 Economic Principles and Policy
ECON 112 Principles of Economics 2
(prerequisite: BSNS 113)

Note: If you intend to progress to postgraduate study in Economics you should include 100-level papers in Mathematics and Statistics.

## **Education**

Education is the fundamental tool with which countries, communities and individuals can improve their wellbeing. Studying Education involves critical analysis of educational theories, policies and practices, to promote the understanding of education in its social context and enhance educational processes.

Education papers investigate how learning happens, and they identify and address patterns of success and failure in education. The study of education is diverse and

or



## **Economics**

"For me, studying Economics has been about gaining insight into global economies - investigating issues that are important to myself, and society generally, is engaging and always satisfying. I studied French alongside Economics, which will be a huge advantage if I choose to work overseas. When I finish my postgraduate study, I want to work in New Zealand for a while. After that, who knows where I will go! Europe? America? Thanks to Economics at Otago, I can go anywhere I like."

### Aleisha Lord

Bachelor of Arts (French), Bachelor of Science (Economics), Bachelor of Commerce and studying towards a Master of Economics

interdisciplinary. Some Education papers focus on sociological explanations; they investigate the politics of education and the relationship of society and group membership to achievement. Other papers focus on psychological explanations such as the mental activities associated with learning. Still others focus on pedagogy and what makes a good teacher.

Education can be studied as a subject major in a Bachelor of Arts (BA) degree, as a minor subject, or individual papers can contribute to other degrees.

Students find that Education papers are a useful complement to their study in other fields such as Physical Education, Sociology, Psychology and Social Work.

## Career opportunities

Education provides a foundation for careers that require critical thought, interactions with people, an understanding of human development and learning, policy analysis and advanced communication.

## 100-level papers

If you intend to major in Education (BA), you must take the following 100-level papers:

#### **EDUC 101 Education and Society**

An examination of the political, social and cultural dimensions of contemporary educational practice.

## EDUC 102 Human Development

Lifespan development in its social contexts. A topic-based paper which includes the study of families, cultures within New Zealand and disability.

## 200-level and beyond

Study includes:

- Critical analysis of the theory and practice of teaching and learning in schools and other contexts
- Information technology in education, including the use of the internet for teaching and learning

- Inclusive education and issues of disability and social justice
- · Aspects of Te Ao Māori
- Relationships between education, families, peers and the community
- · Gender issues in education
- Guidance and counselling
- Historical analysis of the origins of current educational ideas and practices in education
- The relationship between educational practices, social structure and social change in different societies
- The analysis of the policy and ideological contexts of education
- · Early years education
- Introduction to qualitative and quantitative research methods in education.

The College of Education also offers initial teacher education programmes; for information on qualifying to be a teacher see Teaching.

# Electronics

The three-year BSc majoring in Electronics is a programme that will equip you with a thorough understanding of modern electronics, and give you a solid foundation for research or for an industrial career. The BSc ELEC is ideal if you are interested in making smart devices, mechatronics, instrumentation, open-source hardware or industrial electronics. The ELEC pogramme is also available as a minor to contribute to other BSc and BAppSc degrees.

Our graduates work in a wide variety of interesting fields, ranging from smart networks for agriculture, innovative data analytics, through to the development of new instruments for radio astronomy. The following programme is recommended:

## First year

All electronics-related degrees have a standard firstyear programme. The following courses are required for those intending to complete a major or minor in Electronics:

MATH 170	Mathematics 2 (second semester)
PHSI 132	Fundamentals of Modern
	Physics (second semester)

We strongly recommend the following papers for students intending to go on in electronics:

COMP 150 Practical Programming (first semester)

or (if you are starting your programme in the second semester)

COMP 160 General Programming (second semester)

#### 200-level

In your second year, the core ELEC papers are:

ELEC 253	Electronics: Introduction (first semester)
MATH 203	Calculus of Several Variables (first semester)
PHSI 232	Electromagnetism and Optics (second semester)
PHSI 282	Experimental Physics I (second semester)
MATH 202	Linear Algebra (second semester)

# Energy Management / Energy Studies

Global resource depletion, concern about the environment and new renewable energy technologies are creating fundamental changes in the way energy is produced and used in society and the economy. The BSc in Energy Studies and BAppSc in Energy Management programmes provide students with the knowledge and skills to contribute to these rapidly changing and crucially important developments in New Zealand and internationally. Students develop an understanding of: renewable and non-renewable resources; technologies and systems for converting these resources into

useful energy; and the societal, economic and environmental context of energy.

## Career opportunities

Graduates find exciting employment opportunities as energy professionals in a wide variety of energy-related roles. These include: designing and implementing renewable energy supply solutions in energy companies, renewable energy and energy-efficient technology research and development, industrial energy management and developing public energy policy.

## 100-level papers

If you intend to major in Energy Management (BAppSc), you must take the following 100-level papers:

Papers worth at least 120 points, including:
MATH 160 Mathematics 1
MATH 170 Mathematics 2
and one of
PHSI 191, 131, 132 (PHSI 131 is recommended)

Note: The BAppSc course must include a compulsory minor in a related discipline.

If you intend to major in Energy Studies (BSc), you must take the following 100-level papers:

MATH 160 Mathematics 1
MATH 170 Mathematics 2
and one 100-level Physics paper (PHSI 131 is recommended)

## 200-level and beyond

From 200-level onwards, papers become more specialised. You will study thermodynamics – the science underlying energy, and explore the rapid technological developments in renewable energy and relate these to the practical and social issues of energy use and production. You will develop the skills and knowledge that energy professionals require: how to carry out energy assessments, design better energy systems and help people and organisations make better energy decisions.

# **Engineering** (Intermediate)

Students can take a first-year course at Otago to satisfy the Intermediate Year requirements for the University of Canterbury's Bachelor of Engineering.

Otago students enrol for a first-year BSc (EngInt) and take the following 126-point (seven paper) course:

The Chemical Basis of Biology

and Human Health

or

CHEM 111 Molecular Architecture

and

PHSI 131 Physical Law and its Application

or

PHSI 191 Biological Physics

PHSI 132 Fundamentals of Modern Physics
MATH 160 Mathematics 1
MATH 170 Mathematics 2

COMO 101 Modelling and Computation Optional paper Own choice 100-level paper

#### **Variations**

**CHEM 191** 

Option 1: Mechanical, Civil, Natural Resources, Forestry Engineering – programme as above.

Option 2: Computer, Electrical and Electronic Engineering, Mechatronics – add COMP 160 (may drop Chemistry).

Option 3: Chemical and Process Engineering – take both CHEM 191 and CHEM 111.

Option 4: Engineering (Canterbury) or Surveying (Otago) – add ENGL 228 Writing for the Professions and SURV 101 Introductory Surveying.

Students should have a strong background in Chemistry, Mathematics with Calculus and Physics at NCEA Level 3 (or equivalent).

For further information contact a University of Otago Schools' Liaison Officer or Canterbury Engineering Course Advisers engdegreeadvice@canterbury.ac.nz

## **English**

Literature is the "site of a constant creative renewal of language, perception, communication, and imagination" (Zapf).

English at the University of Otago opens the vast and provocative range of literatures written in English; provides a grasp of concepts and techniques for analysing texts; and improves communication skills. Students find their perceptions sharpened, their understanding deepened and their enjoyment enhanced – for life. And they equip themselves for careers in almost any sector of society where critical and flexible thinking and imagination are required.

## Career opportunities

"Good readers and writers can do anything."

A degree or minor in English advances any professional career such as law, education, business or health. Graduates of our department work in journalism, editorial work, publishing, library work, film, radio, theatre and television, personnel and information management, policy initiatives for government, diplomacy, arts management, teaching and educational administration and research for business and industry. Feel free to talk to any of your lecturers about how their papers can help you in employment.

#### 100-level papers

If you intend to major in English (BA), you must take ENGL 121 or ENGL 131 and one further 100-level English paper from the list below:

ENGL 121	English Literature: The Remix
ENGL 127	Effective Writing
ENGL 128	Effective Communication
ENGL 131	Controversial Classics
LING 111	Language and its Structure
ENGL 121	English Literature: The Remix

Presents major writers of English literature from the Middle Ages to the present, focusing on imitation and adaptation of canonical literary works. Authors studied include Chaucer, Shakespeare, Austen, Stoppard, Carter, and a range of poets writing in the sonnet tradition.

#### ENGL 127 Effective Writing

Hones writing skills and helps students to write effectively in any situation. Teaches key aspects of effective writing: grammar, punctuation, style and expression. Practical writing sessions provide supervised opportunities to apply these skills to your academic or professional interests.

#### ENGL 128 Effective Communication

Helps students speak and write with confidence and skill. The paper is designed not only for arts students, but also for students in the sciences or professional programmes who are interested in improving communication skills.

#### ENGL 131 Controversial Classics

A study of literary classics that have attracted controversy for reasons including political content; issues of morality/ obscenity; transgressing conventions of form; polemical works; questions of authorial identity and authenticity; controversies over prizes and literary merit. Works from the historical to the contemporary, and from a wide range of national backgrounds, are covered.

#### LING 111 Language and its Structure

An introduction to the analysis and description of language and its structure: phonetics, phonology, morphology, syntax and semantics; includes a discussion of language change, and similarities and differences among the world's languages.

## 200-level and beyond

Courses range from early English language and culture to the present. Literature papers include contemporary American and New Zealand literature, Shakespeare, modernist and postmodernist fiction and poetry, textuality and visuality, as well as postcolonial and digital fiction.

English offers a minor in English and a minor in Writing. (See separate entry for Writing minor.) The minor in Writing includes papers in Essay and Feature Writing, Travel Writing, Professional Writing, and Creative Non-Fiction.

Both minors may be included as minor subjects in a Bachelor of Arts (BA), Bachelor of Performing Arts (BPA), Bachelor of Commerce (BCom), Bachelor of Theology (BTheol), Bachelor of Applied Science (BAppSc), Bachelor of Science (BSc) or Bachelor of Arts and Science (BASc) degree.

# English for University Purposes

## 100-level paper

ENGL 126 English for University Purposes

This paper caters for non-English majors and multilingual speakers/writers in all academic disciplines looking to improve basic spoken and written communication skills. It teaches advanced reading comprehension, academic and professional writing, and presentation skills.

Note: First-year Health Science students are required to take ENGL 126 if they do not pass the Health Science English Diagnostic Test.

## Entrepreneurship

Entrepreneurs identify problems, develop innovative solutions that address them, and behave resourcefully in starting new businesses to provide the product or service solution to customers. We can help you learn to think as an entrepreneur and to identify opportunities for starting your own company or helping your employer move into new markets.

Entrepreneurship is offered as a minor subject within the BCom and many other degrees. You will need to complete:

BSNS 115 Accounting and Information

23.13	Systems
MART 112	Marketing Management
MART 212	Understanding Markets or any other 200-level Commerce paper
MANT 303	Entrepreneurship
and either	
MANT 301	Managing Innovation and Growth
or	
MART 306	Innovation and New Product Development

Please note: You cannot normally double count 200- and 300-level papers towards more than one qualification.

## **Environment and Society**

The Environment and Society minor deals with the relationships between people, their activities and the biophysical environment, and develops an understanding of the sociocultural context of environmental problems. It is intended for students from across the University who want to develop a sense of environmental awareness in their programme, without taking a specialist minor or major. The minor requires ENVI 111, ENVI 211 and ENVI 311, plus two more papers approved by the course coordinator as being relevant to the minor and the student's area of interest.

### ENVI 111 Environment and Society

This paper increases students' awareness of current environmental concerns at global, national and local levels. Students research and report on global and New Zealand environmental issues, and in small groups produce a short film or presentation on an environmental topic of their choice.

The course is compulsory for students in the Bachelor of Applied Science Environmental Management programme, but it is open to any other students who want to understand contemporary environmental issues.

Papers in subsequent years:

ENVI 211 Environmental History of New Zealand ENVI 311 Understanding Environmental Issues

# Environmental Management

This Bachelor of Applied Science degree provides science-oriented training in environmental management theory and practice, based on a firm understanding of environmental systems, and the human context of environmental problems.

The course is based on a core of environmental management papers, but with the flexibility for students to develop a scientific or technical specialisation, with particular relevance to the environment and their own interests.

## Career opportunities

The demand for Environmental Management graduates remains strong.

Our graduates may find employment in central, regional or local government departments that deal with the environment, resource management and/or planning, as well as environmental consultancies, private industry and nongovernmental organisations. Many have found work in this field overseas.

## 100-level papers

MATH 160 or MATH 170.

If you intend to major in Environmental Management (BAppSc), you must take the following 100-level papers:

Papers worth at least 126 points including:
GEOG 101 Physical Geography
GEOG 102 Human Geography
ENVI 111 Environment and Society
and 72 further points, including STATS 110 or

Note: The course must include either a minor (or a selection of papers that equate to a minor) or a second major taken from an approved list of subjects.

## **Environmental Science**

A postgraduate programme in Environmental Science is offered at master's level. You need a Bachelor of Science degree or equivalent in any natural or physical science field to be considered for a place. You should therefore choose the science subjects that interest you most.

Papers relevant to environmental issues, and a personal interest in the environment, are of benefit. It is advisable to have a basic Statistics course in your degree.

## Career opportunities

Our graduates have found work at regional councils, the Ministry for the Environment and other government agencies concerned with the environment. Graduates also work in a wide range of commercial and industrial activities involving the environment.

## **European Studies**

European Studies covers the remarkable social, economic, political and cultural transformations that have taken place over several centuries and have now, among other changes occurring in Europe, resulted in European integration and the building of the European Union. By focusing on the long-term factors that gave rise to these developments, students will gain a substantive perspective on modern Europe and the issues emerging for an enlarged concert of European nations.

The major in European Studies provides language training in French, German or Spanish. The minor shares the basic features of the major, though language acquisition papers are optional.

### Career opportunities

The aim of the programme is to provide students with a clear pathway to postgraduate training opportunities and careers in law, commerce, arts and the diplomatic service.

## 100-level papers

A core paper provides an overview of the history, languages and culture of Europe. It grounds the study of Europe as a distinct discipline. A range of optional papers allows students to deepen their interest in the history, politics and cultures of European countries.

## 200-level and beyond

Core and optional papers are available at 200- and 300-level. They review the emergence of the idea of Europe and illustrate how this idea has led to European integration, evaluating the prominent role played by rational understanding in underpinning the project of Europe. Other papers compare modernist and postmodernist narratives in the context of contemporary Europe.

There is also a 200-level paper in Politics, Politics of the European Union.

# Exercise and Sports Science

See Physical Education for details on admission into this major.

In the Exercise and Sports Science (EXSS) major students explore the mechanics, physiology and control of human movement, especially in exercise. Graduates of the EXSS major understand, and have the practical abilities in, the role of exercise in health maintenance and sport performance.

Subject areas include: Exercise Physiology and Metabolism; Human Development; Motor Control; Performance Analysis in Sport; Sport Psychology; and Sport Technology.

A review of these programmes is currently being undertaken and they are expected to change. Interested parties should consult the School's website for the most up-to-date information: physed.otago.ac.nz/

## Career opportunities

The EXSS major enhances students' technical, critical and problem-solving skills. These skills have enabled recent graduates to gain employment in: national and regional sports organisations and trusts; city councils; fitness industries; government departments (e.g. ACC, armed forces, police force and High Performance Sport New Zealand); and research. See the graduate career diagram for inspiration — physed.otago.ac.nz/prospective/careers.html



# Film and Media Studies

From the emergence of cinema at the end of the 19th century to the internet revolution, the production and consumption of moving images has changed every aspect of our lives and cultures.

Film and Media Studies focuses on the aesthetic, cultural and social interconnections between cinema, television and new screen technologies. It looks at dominant and alternative examples including Hollywood cinema, global media, mass-entertainment, advertising, art cinema, the avant-garde, local and indigenous media, and documentary practice.

Students can also study Film and Media Studies as a minor to enhance their undergraduate majors. MFCO Communication Studies papers also count towards the FIME major.

## Career opportunities

Film and Media Studies equips students with skills that are widely applicable to a broad range of occupations and professions. Our graduates work as journalists (TV, radio, print), teachers, production managers, assistant editors, curators and policy-makers in organisations such as Television New Zealand, The NZ Film Commission and Te Papa Museum. Others are employed in private, creative and media industries while a number have gone on to independent media careers as filmmakers, comic artists, web-authors and much more.

## 100-level papers

FIME majors must take:

MFCO 101 Screen Form and Culture and

MFCO 102 Understanding Contemporary Media

MFCO 101 Screen Form and Culture

An introduction to analytical and critical skills as applied to the study of moving images, including film, television and social media. The paper asks: how do films make meaning and what does cinema mean to us? The paper combines micro-analysis (of editing, mise-en-scène, cinematography and sound) with macro-analysis (introducing the study of topics such as genre, authorship, stars and national cinemas).

MFCO 102 Understanding Contemporary Media

The paper introduces students to both the historical framework of media studies and the contemporary discourses that define the discipline. Students will engage with theories of representation as well as develop valuable skills for analysing media texts. These skills include semiotics, discourse analysis, ideology critique and postmodernism.

Please check the department website otago.ac.nz/mfco for the most recent paper information.

## 200-level and beyond

Beyond 100-level our papers cover a variety of historical and contemporary issues in media. MFCO Communication Studies papers also count towards the FIME major.

## Combine with other subjects

Film and Media can be combined with the study of a wide range of other subjects, including Communication studies, English, Anthropology, Political Studies, Geography, History and Art History, Gender, Languages and Marketing.

## **Finance**

Finance is a modern and fascinating discipline dealing with money, markets and valuation that is relevant to all aspects of business, personal and professional planning. There are few businesses today that are not acutely aware of the significance of markets and financial planning for their viability. Professionals in finance are involved with a myriad of issues in investments, planning and risk.

Finance is concerned with how markets value risk and the implications for investment, financial planning, shareholder wealth and corporate governance.

It is a useful addition to other disciplines, particularly Economics and Accounting, and for Mathematics and Statistics students wanting expertise in commerce.

The finance curriculum at Otago is structured to prepare you for the Chartered Financial Analyst (CFA) certification exams. As a Finance graduate with a CFA qualification you significantly enhance your employment opportunities in overseas financial centres such as London, Asia and Sydney.

## Career opportunities

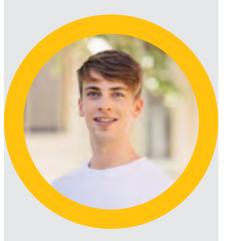
Graduates work in investment and retail banks, brokerage houses, private sector organisations, government departments such as the treasury and the reserve bank, chartered accounting firms, professional organisations, research units, investment consultancies and international agencies.

## 100-level papers

For a Bachelor of Commerce majoring in Finance, you must take the following 100-level papers:

BSNS 112 Interpreting Business Data
BSNS 114 Financial Decision-Making
BSNS 115 Accounting and Information
Systems

FINC 102 Business Mathematics



## Finance

"Whether your career is in business, science, law or the arts; being financially literate is essential. I enjoy the complexity of studying Finance – it ties in with current global issues, provides networking opportunities, and I can apply what I've learnt to my own finances. The career options available to me once I graduate are exciting – I intend to one day work overseas in banking or as a corporate adviser."

## Harry Flett

Studying towards a Bachelor of Commerce (Finance)

You must also meet BCom degree requirements, including the completion of all BCom core BSNS papers – see the Business and Commerce entries for details.

It is also recommended that BSNS 113 Economic Principles and Policy is taken in the first year of study.

## 200-level and beyond

200-level papers cover corporate finance, investments, financial data analysis and personal finance. 300-level includes financial management, finance theory, applied investments, financial institutions, international finance, financial modelling and quantitative methods. The three 100-level BSNS papers listed above must be passed with a grade of at least a C+ (60%) in order to study finance at 200-level.

## **Food Science**

At the heart of Food Science is understanding food – its components, its quality and its consumer appeal. Food Science prepares people for creative, challenging, diverse and rewarding food industry careers.

There are two major areas of study: Food Science (BSc degree) and Consumer Food Science (BAppSc degree).

- Food Science studies food composition and chemistry, product development, food quality and safety and sensory properties. It builds on Biology, Chemistry and Physics, and interacts with disciplines such as Microbiology, Biochemistry, Biotechnology and Nutrition.
- 2. Consumer Food Science studies what influences our food choices: culture, sensory properties (taste, smell, appearance and texture), food quality, diet, policy, lifestyle and marketing. It can combine with Marketing, Management, Nutrition Communication and Food Service Management. (For further information please refer to the Consumer Food Science entry.)

## Career opportunities

Graduates in Food Science work in product development, food quality management, food processing management, chemical/nutritional analysis, research and sensory analysis.

## 100-level papers

If you intend to major in Food Science (BSc), you must take the following 100-level papers:

FOSC 111	Food Principles
FOSC 112	Introduction to Food Marketing
either	
STAT 110	Statistical Methods
or	
STAT 115	Introduction to Biostatistics
CELS 191	Cell and Molecular Biology
CHEM 191	The Chemical Basis of Biology and Human Health

FOSC 111 Food Principles

Introduces scientific and social aspects of food and nutrition, including food composition, food groups, nutrition guidelines, food preferences, food preparation, food preservations and topical issues.

## 200-level and beyond

Three core food science papers, which build your foundation knowledge of the science of food, are required in second year: Food Systems 1, Food Systems 2 and Sensory Science, as well as an introductory microbiology paper. At 300-level, a fullyear paper in Food Product Development will give you valuable experience through a hands-on project, applying all the skills learnt to date. You will also study advanced food chemistry and properties and food processing. Other papers can be selected from Food Microbiology, Advanced Sensory Science or Food and Consumers. Students may also enrol for a degree combining Food Science with subjects such as Chemistry, Microbiology, Human Nutrition and Biochemistry.



## Food Science

"We are facing many issues regarding sustainability and how humans will survive as the pressure on our food system increases. Everybody eats, and I am very interested in the 'what, why and how' of food consumption; how it moves around the planet, technological advances, ethics and the future of food. I am currently working with a major meat company and find myself continually learning about the different facets of food production."

#### Victoria Wilton

Ngāti Kahungunu ki Wairarapa, Rangitāne (Te Matau a Māui/Hawke's Bay/Wairarapa)

Bachelor of Science with Honours (Food Science) Operations at Hellers

# Food Technology

See Food Science (BSc), Consumer Food Science (BAppSc).

# Forensic Analytical Science

Forensic investigations are becoming more and more sophisticated using the latest analytical techniques in order to keep outsmarting the criminals. To support the development and implementation of those techniques very well-trained practitioners and researchers are required.

Additionally, many other professional fields, ranging from patent law, investigative journalism to wildlife protection, are becoming increasingly dependent on forensic knowledge and techniques. In general there is an increased need for excellent investigative skills, which are anchored in solid analytical science training.

The Forensic Analytical Science degree at Otago focuses on modern analytical techniques of forensic biology (taphonomy and DNA) and forensic chemistry (spectroscopy, mass spectrometry). The principal forensic researchers at Otago develop new applications and assist New Zealand and overseas law enforcement agencies with forensic casework like determining linkages between seizures of illicit drugs. Postgraduate students are involved in developing new techniques and applications.

The course supports many other possible career opportunities, for example in areas of commercial interest such as primary product traceability (milk powder, meat, wine) and combatting counterfeit materials (pharmaceuticals), which are growing rapidly in number, importance and scope.

#### 100-level

The first year includes compulsory papers in Chemistry and Cellular Biology. Statistics and either further Biology, Physics or Human Body Systems papers would be an appropriate beginning for the Forensics major in the Applied Science degree.

## 200-level

The summer paper FORB 201 serves as an excellent introduction for forensic biology and forensic science in general. At second year you will study Chemistry and Genetics as well as a specialist Forensic Analytical Science paper (FORS 201) that introduces modern analytical techniques and concepts of Forensic Science including chemistry, computer forensics, statistics and expert witnessing.

#### 300-level

Analytical Forensic Biology (FORS 301) focuses on the forensic application of DNA and its integration with other biological evidence. The Forensic Chemistry (CHEM 306) paper teaches advanced forensic analytical chemistry techniques such as Raman and NMR spectroscopy and different types of mass spectrometry and the statistical tools to interpret complex data. You will augment your choice of papers relevant to your interest in discussion with the course director. After the third year there is the option to embark on a half-year exchange programme with the forensic programme at Florida International University in Miami, which provides excellent training in complementary forensic topics.

The Bachelor of Applied Science is a threeyear degree programme that incorporates a compulsory second major or a minor. Recommended second major or minors include Biochemistry, Applied Geology, Statistics, Bio-anthropology, Law and Pharmacology.

Note: Applicants should be aware that the job market in New Zealand for practising forensic scientists is small and that this course is not a qualification for such a career without further study or employment experience. However, the course provides excellent preparation for those wishing to pursue postgraduate training in the profession of Forensic Science.

## French

French is a major international language. It is spoken in Europe, Africa, Asia and the South Pacific region in a total of 47 countries around the world. The French Programme offers courses and study opportunities for all levels from beginners to postgraduate level.

French students study language, literature and culture, and receive tuition from native French speakers in conversation classes. Students are encouraged to use the French language whenever possible, both in and outside class.

## Career opportunities

Graduates with expertise in French immediately increase the countries in the world where they may pursue a variety of careers. They also work in New Zealand in roles which call for French specifically such as teaching and translating, or where their language skills are an added value, such as in journalism, law, business, government departments (e.g. Foreign Affairs and Trade) and tourism.

#### 100-level papers

There are two routes to the major in French (BA): one for those with no prior knowledge of French, the other for those with prior knowledge. The papers required in the first year are:

BA major (for those with no prior knowledge of the French language):

FREN 131 Introductory French 1
FREN 132 Introductory French 2
GLBL 101 Introduction to Intercultural
Communication

BA major (for those with prior knowledge of the French language\*):

GLBL 101 Introduction to Intercultural Communication

FREN 232 Intermediate French

FREN 233 French for Professional Purposes

\*Students may be given a placement test to ensure they are enrolled at the appropriate level.

FREN 131 Introductory French 1

A communicative course for beginners and near-beginners.

FREN 132 Introductory French 2

A communicative course for nearbeginners that follows on from FREN 131.

GLBL 101 Introduction to Intercultural Communication

Understanding communication across cultures: communication styles, interpersonal relationships, and intercultural competency.

FREN 232 Intermediate French

The development of skills (listening, speaking, reading and writing) in French language to an intermediate level for those with the equivalent of four to five years of high school French.

Note: This paper should be taken in the first year in order to complete the major in three years.

# FREN 233 French for Professional Purposes

This language acquisition paper has a practical focus, with a particular emphasis on the development of students' aural and oral skills.

## 200-level and beyond

Beyond first-year papers students may continue with advanced language acquisition papers and choose from a range of papers on French, European and global cultures. BA(Hons), and the postgraduate qualifications MA, PGDip and PhD are also available.

## Assistantships and exchanges

The French Government offers bursaries and teaching assistantships for study and work experience in France, New Caledonia and Tahiti. A student exchange system operates with Lyon 3, a university in South-East France, Paris III Sorbonne Nouvelle as well as universities in francophone Canada and Belgium. Students may attend a one- or two-semester course which counts towards an Otago degree.



# **Gender Studies**

Gender, and how we live it, has farreaching implications for our lives. It shapes the work we do and how we spend our leisure time, our income, our family relationships and friendships, the value and meanings we attach to other people and activities, what we eat and how we dress, and even how we speak and move.

In the past few decades, theoretical and everyday notions of gender have undergone dramatic changes, influenced by changes in the organisation of society and by a rapidly expanding field of critical inquiry.

A major can be combined with subjects such as Sociology, Anthropology, Criminology, English, Media, Film and Communication Studies, Politics, Law, History, Art History, Education and Social Work.

## Career opportunities

Graduates work in social and cultural policy development and analysis, education, the media, professional arts, EEO, human rights and health professions, non-governmental organisations, management, health and community advocacy, and social and family work.

## 100-level papers

If you intend to major in Gender Studies (BA or BASc), you must take the following 100-level papers:

GEND 101 Gender in Everyday Life

Explores the social relationships between women and men, with New Zealand examples from the past and present.

GEND 102 Bodies, Sexualities and Selves

Experiences of bodies, sexuality and identity, and the connections between them, in contemporary and historical settings.

## 200-level and beyond

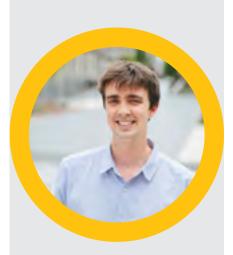
Papers cover gender and work, consumer culture, the media, state power, masculinity, victimology, feminist theory, sexuality and subjectivity. At 200- and 300-level, you can also select from a wide range of gender-related papers taught in other departments.

## Genetics

Genetics is a rapidly-progressing highimpact science, and a central theme of modern biology and medicine. Genetics delves into the full diversity of life, zooming in to life's molecular basis yet revealing the big picture of whole organisms, populations, millions of years of evolution, and even the future.

## Career opportunities

Genetics is a high impact, multidisciplinary science that can develop you into a champion problem-solver for society and the environment: whether in health, agriculture, biotech, conservation, and of course at the frontiers of scientific research. The wide-ranging skills behind a genetics degree could propel you into biologicallybased industries, or research and government organisations. You could be a researcher, policy analyst, biotechnologist, conservation worker, or biosecurity analyst, to name but a few! With further training, you could be a patent lawyer, genetic counsellor, or forensic scientist.



## Genetics

"Since finishing my master's, I have been working as a scientist for the Research and Development team at Pacific Edge Limited, a molecular diagnostics company with a focus on the early detection and management of bladder cancer. My time at Otago, particularly my postgraduate study in the Cancer Genetics Laboratory, prepared me really well for this work and fostered my interest in cancer genetics research."

## Tom Brew

Master of Science Scientist, Pacific Edge Ltd

## 100-level papers

Students intending to major in Genetics must take certain 100-level papers:

CELS 191 CHEM 191	Cell and Molecular Biology The Chemical Basis of Biology and Human Health
and two of	
BIOC 192	Foundations of Biochemistry
BIOL 112	Animal Biology
BIOL 113	Biology of Plants
ECOL 111	Ecology and Conservation of Diversity
HUBS 191	Human Body Systems 1
HUBS 192	Human Body Systems 2
MATH 151	General Mathematics
or	
MATH 160	Mathematics 1
STAT 110	Statistical Methods
or	
CT 1 T 1 1 F	

STAT 115 Introduction to Biostatistics

Note: There is no 100-level Genetics course. Genetics forms a considerable component of CELS 191 Cell and Molecular Biology.

## 200-level and beyond

200-level papers introduce the concepts and techniques of genetics. 300-level papers are for students majoring in biological sciences and provide advanced understanding of the genetics of higher organisms.

# Geographic Information Systems

The BAppSc in Geographic Information Systems will appeal to students with an interest in geography, computers, working with maps, and applying map data to examine a wide variety of applications and problems. The degree covers all aspects of geographic information from its representation on maps and in aerial survey (including satellite remote sensing), how different types of information are brought together, techniques of spatial data analysis and approaches to data visualisation. It includes papers from Surveying, Information Science and Geography.

Geographic information systems have become widespread in the form of Google Earth/Maps and through mobile technologies. They are commonly used for applications in business, health, ecology, planning, international development, environmental conservation and many areas of interest. Students can blend required courses with an application area that is of interest to them to get the most out of the degree.

## Career opportunities

Graduates with the BAppSc in GIS work in private consultancies, local authorities, central government departments and nongovernment organisations in various analysis, consultancy and management roles.

## 100-level papers

If you intend to major in Geographic Information Systems you must take the following 100-level papers:

Papers worth at least 120 points including:

COMP 101 Foundations of Information
Systems

COMP 150 Practical Programming
or

COMP 160 General Programming SURV 102 Geospatial Sciences MATH 160 Mathematics 1 or

MATH 170 Mathematics 2 and at least one of GEOG 101, 102; STAT 110; SURV 101, ENGL 228

Note: The Bachelor of Applied Science is a threeyear degree that incorporates a compulsory second major or a minor, making this a very versatile programme. An honours degree programme is also an option in Geographic Information Systems.

## 200-level and beyond

200-level papers introduce the concepts and techniques of GIS, databases, networks, systems analysis and a geographical or surveying application.

300-level papers introduce remote sensing, photogrammetry, GIS programming, spatial databases and further spatial analysis and a geography / surveying application.

Opportunities for postgraduate study and research include a Master of Applied Science (MAppSc, coursework masters, papers only), as well as the research-based MSc and PhD degrees.

# Geography

Geographers study the environment – including the physical processes that shape the natural environment, social and cultural processes that explain patterns of human activity, and the interactions between human activity and the natural world. Geography explores environmental problems and solutions to those problems. Geography helps us manage human activity and secure the future of our planet.

BSc and BSc(Hons) students focus on physical geography, including land-forming processes and their expression in the landscape, the earth's weather systems and climates, factors which lead to geographic variations in the distribution and growth of living things, and environmental controls on the availability and quality of water. BA and BA(Hons) students focus on issues of uneven development, social themes like ethnicity, childhood and gender, geopolitical conflict, the human use of natural resources and the process and implications of economic restructuring. Bachelor of Applied Science (BAppSc) students focus on processes of "environmental management", taught through a series of undergraduate and postgraduate papers in Geography. They also take science papers in Geography, such as climatology, biogeography, hydrology and geomorphology, and other science credits. Students are encouraged to pursue associated sciences, such as Geology, Surveying (particularly GIS), Botany, Ecology, and Commerce papers, and to develop a minor in one of these subjects.

## Career opportunities

Geography graduates work in the public and private sectors. Their skills and interdisciplinary outlook prepare them for a diverse range of careers. Central government departments, state-owned enterprises, local government and private corporations employ Geography graduates in areas such as regional and resource planning, environmental management, natural resources (especially water) analysis, social and economic research, social services and tourism. Geographers also become teachers. Many graduates have studied for higher degrees at the University of Otago or at universities in North America, Australia and the United Kingdom.

## 100-level papers

If you intend to major in Geography (BA, BASc or BSc) or complete an honours degree, you must take the following 100-level papers, preferably in your first year of university study:

GEOG 101 Physical Geography GEOG 102 Human Geography

GEOG 101 Physical Geography

Introduces the geographic study of the earth's environmental systems, emphasising climate, landforms, vegetation, surficial materials and water.

GEOG 102 Human Geography

Focuses on environment and development themes, urban growth, resource and economic and community development, and global and political spaces.

## 200-level and beyond

A core paper at the 200-level is an introduction to research methods in Geography, while another at the 300-level places greater emphasis on field studies. Optional papers include papers dealing with soils, climate, plants, people and the environment, freshwater resources, environmental management, geomorphology, hydrology, resource evaluation and planning, social, political and urban geography, transformations

in developing countries, and uneven development.

Opportunities for postgraduate study and research include a two-year programme in Planning, programmes for the postgraduate diplomas in Arts and Science, as well as the BA(Hons), BSc(Hons), BAppSc(Hons), MPlan, MA, MSc, MAppSc and PhD degrees.

## Geology

Geology, the science of the Earth, is concerned with understanding geological principles and processes. This understanding is increasingly essential for those concerned with natural hazards, civil engineering problems, impacts of global change, the responsible use of Earth's natural resources, pollution and waste disposal, and environmental and resource planning and monitoring.

Geology at the University of Otago highlights the exciting and dynamic geological history of New Zealand and the origin of New Zealand's fauna and flora. Geology/Earth Science combines well with Anthropology, Botany, Chemistry, Ecology, Environmental Science, Geography, Marine Science, Physics, Surveying and Zoology.

## Career opportunities

Graduates work in the assessment of natural hazards (earthquakes, volcanoes, landslides, floods); site investigations for engineering projects; environmental planning and monitoring; conservation and management of soil and groundwater resources; exploration for energy and mineral resources; research into Earth processes and history; Antarctic geology; oceanography and climate change. They work in the private sector (e.g. earth science or engineering consultancies, mineral exploration or mining companies, oil companies), regional councils or government agencies (e.g. GNS Science, NIWA) and teaching.

## 100-level papers

If you intend to major in Geology (BSc, BASc or BAppSc), you must take the following 100-level papers:

EAOS 111 Earth and Ocean Science
GEOL 112 Dynamic Earth, a New Zealand
Perspective

MATH 160 Mathematics 1

Note: Students must also take a paper worth 18 points from BIOL, BTNY, CELS, CHEM, ECOL, PHSI or ZOOL before completing a degree.

#### EAOS 111 Earth and Ocean Science

Features the evolution of continents and oceans; sea-floor spreading; mountain ranges; plate tectonics; oceanic circulation and global cycles; erosion and sedimentation on land and sea; marine biological systems; evolution of life through the ages; oceans and climate; and the Solar System.

GEOL 112 Dynamic Earth, a New Zealand Perspective

Features volcanoes, earthquakes and related hazards; crystals, minerals; igneous, sedimentary and metamorphic processes; geological structures and geological maps; Earth resources; and New Zealand's geological evolution.

## 200-level and beyond

Two core geology papers, which build on your foundation knowledge of minerals and field geology, are required at 200-level: Minerals and Rocks (GEOL 251) and Field Studies and New Zealand Geology (GEOL 252). At 300-level, an Advanced Field Studies (GEOL 344) paper will provide training and practical expertise in advanced field techniques and a Tectonics (GEOL 353) paper will provide professional knowledge of tectonic systems. Students have a wide range of optional papers to select from at both levels and have the opportunity to carry out independent fieldbased research in their third and fourth years of Geology. For further information on papers and qualifications, please see: otago.ac.nz/geology

Opportunities for postgraduate study include BSc(Hons), BAppSc(Hons), MSc, MAppSc, PGDipSci, PGDipAppSc and PhD. Some advanced papers may be valuable to students majoring in other subjects.

## German

German is one of the major European languages. German culture has contributed greatly to the development of literature, science, philosophy, music and the visual arts in the Western world, and modern Germany is a key player in the European Union. The study of German enhances many other disciplines. It involves systematically learning a language that is a close cousin of English.

Courses are based on active use of the language, both oral and written, and include extra-curricular activities, such as German films, visits to museums, cultural events, camps and an annual play. Study in Germany is possible through exchange arrangements with the Universities of Heidelberg and Tübingen.

## Career opportunities

Graduates work in teaching, the arts, science, the media, law, government departments (e.g. Foreign Affairs and Trade), tourism and business.

## 100-level papers

There are two routes to the major in German (BA): one for those with no prior knowledge of German, the other for those with prior knowledge. The papers required in the first year:

BA major (for students who have not previously studied German):

GERM 131 Introductory German 1
GERM 132 Introductory German 2
GLBL 101 Introduction to Intercultural
Communication

BA major (for students with an appropriate level of German language):

GERM 230\* German Language 3
GERM 231\* Intermediate German 1
GLBL 101 Introduction to Intercultural
Communication

GERM 131 Introductory German 1

This is German language for absolute beginners.

GERM 132 Introductory German 2

Basic German language. Continuation of GERM 131. Suitable for those with two to three years of secondary school German.

GLBL 101 Introduction to Intercultural Communication

Understanding communication across cultures: communication styles, interpersonal relationships, and intercultural competency.

## GERM 230\* German Language 3

The development of skills in German language to intermediate level, building on GERM 132; also suited to incoming students with prior knowledge of the language but not yet ready for GERM 231.

## GERM 231\* Intermediate German 1

The development of skills in German to intermediate level (for those with the equivalent of four to five years of high school German).

Note: This paper should be taken in the first year in order to complete the major in three years.

\*A placement test will decide which of GERM 230 and GERM 231 is appropriate.

## 200-level and beyond

Papers continue the study of the German language, and of German, European and global cultures. A range of papers is available at 300- and 400-level. BA(Hons), and the postgraduate qualifications MA, PGDip and PhD are also available.

## Greek

See Classics.

Greek papers offer linguistic training and the experience of reading major works of ancient Greek literature, drama, history and philosophy in the original language. (For Classical Studies courses taught in English translation, see Classics.) Greek and/or Latin papers constitute an optional component of the major for the BA and are strongly recommended for the BA(Hons) in Classics (at 400-level). A knowledge of ancient Greek (and/or Latin) is an essential skill required for postgraduate work in Classics.

## 100-level papers

GREK 111 Introductory Greek 1

A reading-based beginners' paper covering the basic elements of ancient Greek grammar and vocabulary, designed to develop reading skills in ancient Greek.

GREK 112 Introductory Greek 2

A continuation of GREK 111, incorporating more advanced grammar and syntax and designed to develop reading skills in ancient Greek.

#### 200-level and beyond

Greek papers at these levels focus on improving language skills and reading major texts of Greek literature in the original language.



## **Health Sciences First Year**

The Health Sciences First Year (HSFY) prepares students seeking entry into Health Sciences professional degrees: Dentistry (BDS), Medical Laboratory Science (BMLSc), Medicine (MB ChB), Pharmacy (BPharm), or Physiotherapy (BPhty). It is also a suitable academic preparation for students wishing to take programmes such as Oral Health (BOH), Dental Technology (BDentTech), Radiation Therapy (BRT), or a BBiomedSc or BSc majoring in biological sciences.

HSFY is only available at Otago, and must be completed in its entirety in your first year of university study. HSFY consists of seven compulsory papers plus the option to take an eighth paper in the second semester.

The Health Sciences First Year course should be taken in your first year of university study. If you're thinking of completing any university study prior to enrolling in the Health Sciences First Year course, you are strongly advised to contact the Health Sciences Admissions Office for further information before commencing study. If you have already completed prior university study, you should contact the Health Sciences Admissions Office for further information.

Enquiries should be made to: The Manager, Health Sciences Admissions health-sciences@otago.ac.nz

The HSFY programme comprises seven compulsory papers:

BIOC 192 Foundations of Biochemistry
CELS 191 Cell and Molecular Biology
CHEM 191 The Chemical Basis of Biology
and Human Health
PUBH 192 Foundations of Epidemiology

HUBS 191 Human Body Systems 1HUBS 192 Human Body Systems 2PHSI 191 Biological Physics

Notes:

- 1 You may study an additional optional paper during the second semester (from the Approved List available at otago.ac.nz/healthsciences). In this instance, the results of your best seven papers will be counted for the purposes of admission to the Health Sciences professional programmes, provided the compulsory seven papers are passed at or above the required minimum standard for admission to any of the Health Sciences professional programmes.
- 2 All HSFY students will sit an English diagnostic test. If you don't achieve an acceptable standard in the English diagnostic test, you are required to complete ENGL 126 during your second semester.
- 3 CHEM 191 and PHSI 191 are challenging papers for those who have not studied Chemistry or Physics at NCEA Level 3. Otago provides a distance-taught Introductory Chemistry and Summer School paper CHEM 150, and Jump Start Physics courses. Contact the Departments of Chemistry and Physics for details.
- 4 Students who apply to either Medical Laboratory Science, Pharmacy, Physiotherapy, or Radiation Therapy only, and have achieved a minimum grade average, will be considered for first round offers under the Single Programme Preference. For further information and criteria please contact health-sciences@otago.ac.nz

## Course approval

HSFY course advising occurs once each semester. The first session in February provides advice to the incoming class. The second session, usually in early July, provides advice to those considering enrolling in the optional eighth paper, and to those who are concerned with progress in their HSFY or who are considering a programme change.

Course advice is available throughout the year through the Health Sciences Admissions Office.

## Admission to second year

Admission to second-year classes in Dentistry requires you to pass all compulsory HSFY papers with a minimum average of 70%, with no paper less than a B- (65%). You must have a current Undergraduate Medicine and Health Sciences Admission Test (UMAT) result. Having achieved the academic and UMAT thresholds, students proceed to interview. The final determining factor for selection for an applicant who has met all three admission criteria will be based on the average mark in the HSFY papers.

Admission to second-year classes in Medical Laboratory Science requires you to pass all HSFY papers, normally with a minimum average of 65%.

Admission to second-year classes in Medicine is based on a combination of a student's academic grades in HSFY (67%) and weighted UMAT result (33%), with the additional requirements that you must attain a minimum mark of 70% in all of the papers.

Admission to second-year classes in Pharmacy requires you to pass all HSFY papers, normally with a minimum average of 65%.

Admission to second-year classes in Physiotherapy requires you to pass all HSFY papers, normally with a minimum average of 65%.

Māori or New Zealand-resident indigenous Pacific Island students can ask to have their heritage taken into consideration along with their application to second-year professional programmes. The Division of Health Sciences wishes to attract Māori and other Pacific Island candidates into the health professions as they have a special role to play in the delivery of health care to their people.

HSFY is only one of the pathways of admission to the professional programmes. For further details visit the Health Sciences website, otago.ac.nz/healthsciences

This information is provided on the understanding that you are classed as a domestic student.

If you do not meet these residential requirements you should contact:

International Office
University of Otago
PO Box 56
Dunedin 9054
international.enquiries@otago.ac.nz

## Hebrew

Classical Hebrew, which is closely related — but not identical to — the modern language spoken in Israel, is the language of the Hebrew Bible or Old Testament, and is an essential tool for the study of both the Bible and ancient Judaism. It is taught at the University of Otago to an advanced level.

## 100-level papers

HEBR 131 Introductory Biblical Hebrew 1

A paper for beginners covering the basics of Biblical Hebrew grammar and vocabulary, to enable you to read the Hebrew Bible in the original.

HEBR 132 Introductory Biblical Hebrew 2 A continuation of HEBR 131, including the exegesis of selected passages from the Hebrew Bible.

## 200-level and beyond

Hebrew can be studied to an advanced level by way of selected papers in Biblical Studies.

## **History**

Historians explore how and why change has occurred in human societies over time. Sometimes controversial, always intriguing, History is a subject for the intellectually curious, for those fascinated by the complex diversity of the human historical experience, and for those seeking deeper perspectives on the world's current issues and challenges.

## Career opportunities

History graduates enter a great range of professions, including government service, industry, all levels of teaching, journalism, broadcasting, museum and library work. Our graduates have the ability to collect and analyse data and write clear, coherent, and balanced assessments based on this analysis, together with the ability to think independently, flexibly and objectively. As artificial intelligence takes over much mundane work, these unique 'humanities' skills are increasingly sought after by a wide range of employers.

## 100-level papers

If you intend to major in History (BA or BASc), you must take two 100-level HIST papers worth at least 36 points (any 100-level ARTV paper may be substituted for one 100-level HIST paper).

Note: It is possible to take 200-level papers after completing only one 100-level History paper or if you have completed 108 points in total in any subject.

HIST 102 The Global Twentieth Century

A fast-paced journey through the twentieth century's wars and revolutions, booms and busts, dictators and democratic forces, providing students with a secure historical basis for understanding today's complex globalized world.

HIST 106 East Meets West: Encounters in Global History

An exciting exploration of the way encounters between the peoples of Asia, Europe and the Middle East have shaped human history. Topics covered include the spread of Islam, the exchange of goods and ideas along the Silk Roads, and the rise and fall of Eurasian empires.

HIST 107 New Zealand in the World, 1350-2000

New Zealand history in global perspective: explore the way forces of imperialism, colonisation, capitalism and racial conflict have shaped modern New Zealand and its place in the world.



# History

"After graduating, I spent a year travelling the world before settling into a career with MFAT. I've worked across the Pacific, in the United States and am now in South Africa, covering a range of trade and political issues at the New Zealand High Commission. Studying History at Otago helped me learn to think critically and creatively. Whether I'm based in Wellington or Pretoria, I draw on skills from my degree every day."

## Adam Linnell

Bachelor of Arts with Honours (History and Politics)

Second Secretary at New Zealand High Commission, Pretoria

HIST 108 From Medieval to Modern Europe

An examination of Europe's dynamic growth from the "Dark Ages" to a global superpower by the nineteenth century, offering an historical understanding of Europe's crucial role in the making of the modern world.

## 200-level and beyond

Advanced courses study a wide variety of geographical areas – including Medieval and Modern European history, Asian and Pacific history, New Zealand, Australian and US history – and themes, including gender history, medical history, environmental history and historical methods. At Otago, students have access to the resources of the Hocken Collections, one of the best research libraries in the country.

# Hospitality

If you are sitting in a coffee shop whilst reading this, or perhaps planning a holiday with friends and family, then you are experiencing some form of hospitality. Hospitality, together with tourism, represents one of New Zealand's largest export industries and is so much a part of our lives that we almost forget how important it is.

This minor provides a unique introduction to the workings of hospitality with both an Aotearoa/New Zealand and a global context. It focuses not only on many of the most interesting businesses in the industry but also provides the fundamental concepts behind them.

It will challenge you to think about hospitality and what sets it apart from other business sectors by looking at areas such as: the production of experiences; the significance of human resource management; the impact of seasonality; yield (revenue) management and the unique nature of distribution for hospitality products.

This minor will appeal to BCom (Tourism) students interested in the accommodation, events, and food and beverage sectors, or in running their own hospitality businesses. It is also an ideal addition to the BCom (Management, Economics or Marketing), or degrees such as Languages, as it will assist students in applying the skills from their major subjects to one of the world's largest industries.

Possible career paths include: management and marketing functions in hotels and resorts; small business operation; logistics, marketing or management for a tour company; events and conference management and wine marketing.

## 100-level papers

TOUR 103 Introduction to Hospitality

## 200-level papers

TOUR 218 Tourism and Hospitality Enterprise Management

plus THREE of the following

TOUR 214 Introduction to Wine Business

TOUR 216 Sport Tourism
TOUR 217 Tourist Behaviour

TOUR 303 Tourist Accommodation

Management

TOUR 304 Event and Conventions

Management

Must include at least one 300-level paper.

# **Human Nutrition**

Studying Human Nutrition provides career opportunities in a variety of disciplines both in New Zealand and worldwide. With new knowledge and skills, you will be able to make a real difference at the global, national, community and whānau levels. It provides an excellent opportunity for those seeking graduate entry into professional medicine programmes, e.g. Medicine, Dentistry, Pharmacy.

Human Nutrition papers are useful and interesting additions to a degree in Food Science, Physical Education, Marketing, Physiology, Microbiology, Biochemistry, Chemistry, Psychology and many other disciplines.

High school students are highly recommended to take Chemistry to Year 13 and Biology, Mathematics (with Statistics) and English to Year 12, preferably Year 13.

## Career opportunities

Human Nutrition will equip students with skills that can be used in a number of careers. Our graduates work in the health sector, government organisations, corporations, research, teaching, high performance sport, private practice and the food industry.

## 100-level papers

There are no 100-level papers in Human Nutrition. If you intend to major in Human Nutrition (BSc or BASc) you must take the following 100-level papers:

BIOC 192	Foundations of Biochemistry
CELS 191	Cell and Molecular Biology
CHEM 191	The Chemical Basis of Biology and Human Health
HUBS 191	Human Body Systems 1
HUBS 192	Human Body Systems 2

It is highly recommended that students take either STAT 115 Introduction to Biostatics or STAT 110 Statistical Methods as a statistics paper is required for admission into our postgraduate programmes.

## 200-level and beyond

200-level papers cover nutrient metabolism, nutrition and health, sports nutrition and management of food service operations. Papers in Biochemistry and Physiology at 200-level are highly recommended as part of a major in Human Nutrition. 300-level papers give a grounding in Human Nutrition as an applied scientific discipline.

Students who wish to keep their options open to apply for admission into the Master of Dietetics programme must include the major subject requirements for a BSc in Human Nutrition in their qualification as well as the papers listed below:

FOSC 111	Food Principles
HUNT 231	Foodservice Operations
<b>HUNT 331</b>	Foodservice Management
BIOC 230	Biochemistry or BIOC 223 Cellular Biochemistry and Metabolism
PHSL 251	Physiology
STAT 115	Introduction to Biological Statistics or STAT 110 Statistical Methods
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Other degrees that include majors in Human Nutrition are: Bachelor of Applied Science (BAppSc) majoring in Sport and Exercise Nutrition, and Bachelor of Biomedical Sciences (BBiomedSc) majoring in Nutrition and Metabolism in Human Health.

# Human Resource Management

People are the heart blood of every organisation; without people organisations cannot function. Human Resource Management (HRM) gives you the skills, knowledge and practice to motivate employees to excel.

HRM teaches you the underlying principles of managing people in organisations from how to ensure the right talent is in the right place at the right time, to dealing with poor performance and conflict. Not only does an HRM major provide you with practical tools, it also explores the strategic role of HRM in an organisation and how HRM practice can support and influence the strategic direction of an organisation.

The skill set you will develop in the HRM major or minor is important in any role that involves working with and leading people. HRM at Otago will equip you with skills and knowledge that will kick-start your career and give you greater potential. People management skills are integral to the workplace of today, and will prepare you for the connected and collaborative workplace of tomorrow. HRM is perfect

as both a stand-alone degree or to complement other areas of interest.

## Career opportunities

The HRM major and minor will give you the skill set to apply for HRM roles in large or small, public or private organisations. These usually begin with HR administrator roles, with progress through to advisors and managers. Alternatively you can specialise in areas such as employment relations, talent management, learning and development or recruiting. The skill set in the HRM major will also enable you to enter graduate recruitment schemes.

## Majoring in Human Resource Management

If you intend to major in HRM, you must complete the following papers and also complete the other BCom core BSNS papers (see the Business and Commerce entries for details):

#### 100-level paper

MANT 101 Managing for Performance

## 200-level papers

MANT 250 Managing People
MANT 251 Managing Organisations

plus a further one paper from:

MANT 222 Interpersonal and International Business Communication

MANT 252 Developing Responsible Leadership

#### 300-level and beyond

MANT 345 Strategic Human Resource Management

MANT 346 Employment Relations plus a further two papers from:

MANT 339 Human Resource Development

MANT 343 Negotiation and Dispute

Resolution

MANT 347 Occupational Psychology



# Human Resource Management

"My studies covered all of the main areas of HR and enabled me to select the areas that specifically interested me. After graduating, I secured a job that allows me to put into practice the knowledge and skills I gained at Otago. My role is completely diverse – I'm involved in recruitment, onboarding, remuneration, career development, employee wellness, exit interviews and co-ordination of our Graduate Programme. Every day is different!"

## Melanie Warhurst

Bachelor of Commerce (Marketing) and Diploma for Graduates (Human Resources) Human Resources Administrator, Assurity Consulting

# **Human Services Law**

The minor in Human Services Law can be taken in conjunction with a major in the degrees of Arts, Performing Arts, Science, Applied Science, or Commerce. The papers focus on areas of the law such as Family Law, Criminal Justice, Law and Psychiatry, Sentencing, and the Treaty of Waitangi.

To fulfil the requirements for a minor in Human Services Law you must complete the first year paper, LAWS 101 The Legal System, along with 60 points made up from a list of five 300- and 400-level papers. Admission to any of these papers is subject to approval from the Dean of Law.



# **Immunology**

Also see Microbiology.

Your immune system has evolved to protect you from disease caused by infection or cancer. Immunology courses at Otago outline the evolution of the immune system, and explain how the immune response is organised in modern vertebrates. Major topics covered include immunity to infectious diseases and cancer, as well as autoimmunity, allergy and transplantation. You will learn how to "re-programme" immune responses through vaccination and immunotherapy. In the laboratory, you'll get the chance to learn key immunological techniques. Otago immunology lecturers are active researchers and direct state-ofthe-art research laboratories.

## Career opportunities

Immunology is a rapidly advancing and exciting discipline with many jobs available in research and diagnostic laboratories both nationally and internationally.

National employers include Crown Research Institutes, the pharmaceutical and biotechnology industries, medical research institutes and universities.

## Immunology teaching

Immunology is taught as part of the Microbiology (BSc) programme at 100-level (HUBS 191), at 200-level (MICR 221 and MICR 223) and 300-level (MICR 334 and MICR 332). Immunology is taught in tutorial format at 400-level in MICR 464.

## BBiomedSc programme

An Infection and Immunity major within the Biomedical Sciences degree programme (BBiomedSc) is available. This degree structure is essentially similar to the BSc programme, but has a broader biomedical base at 100-level with 200- and 300-level papers being orientated towards medical microbiology and immunology. Two Microbiology papers are required at 300-level: Health Microbiology (MICR 332) and Advanced Immunology (MICR 334).

## Postgraduate programmes

Immunology postgraduate programmes (PGDipSci, BBiomedSc(Hons), BSc(Hons), MSc, and PhD) are available. Current research interests of the department include the fundamental biology of white blood cells, infectious diseases and cancer, as well as development of new vaccines, diagnostics and treatments.



## **Information Science**

"When I was thinking about university study, science and commerce were both really appealing - I'm glad I settled on Information Science as it offers the best of both worlds, combining business and technology in the one degree. I've learnt so much about the role information and information systems play in the constantly changing "digital age". This knowledge will allow me to work in corporate organisations to bring people and business together with new technologies in innovative ways."

### Sarah Meldrum

Studying towards a Bachelor of Science with Honours (Information Science)

# Indigenous Development He Kura Matanui

Indigenous Studies is an area of increasing national and international interest, both amongst students and potential employers, where Māori and indigenous development issues are of increasing importance.

A BA, BA(Hons) or BASc majoring in He Kura Matanui/Indigenous Development aims to provide students with a strong grounding in core indigenous cultural values, concepts, issues and practices, using Māori and other indigenous examples and readings, including the Pacific. Students will include elective papers from other disciplines relevant to the focus of the programme on contemporary cultural, social, intellectual and economic development of indigenous peoples in an international context.

## Major subject requirements

100-level: MAOR 102, PACI 101 and

MAOR 110

200-level: MAOR 202, PACI 201; and any

two of ANTH 204-206, 208, ÅRCH 204, GEOG 278, HEAL 203, HIST 223, 226, MAOR 203-219, MFCO 212, PACI 210, POLS 202, 207,

SPAN 243.

300-level: INDV 302; and any three of ANTH

324, ARCH 301, ECON 303, ENGL 332, GEOG 378, HIST 326, MANT 341, MAOR 303-319, MART 305, MFCO 318, PACI 301, 310, PHSE 320, POLS 309, SPAN 343, TOUR

301, 306.

There is also the option of selecting Indigenous Development as a minor.

## **Information Science**

Information Science sits at the intersection of technology, people and organisations. It is an exciting and rapidly changing field that solves problems through using computing technology to help people and organisations work more effectively. An understanding of Information Science is important in order to succeed in business, and in order to develop effective innovative technology solutions: creating the latest gadget is pointless if we can't also understand how it will be used by people and organisations to meet their needs.

Information Science can be taken as a major for a Bachelor of Commerce (BCom), Bachelor of Science (BSc), Bachelor of Arts (BA) or Bachelor of Arts and Science (BASc), and is a useful complement to papers from each of these disciplines.

## Career opportunities

Graduates of Information Science are sought after in a range of fields such as business, science, education, health, music and mass media, with roles from data analysis to building large-scale software systems. Careers in information and communications technology (ICT) are exciting, engaging and well-rewarded; examples of careers of our graduates may be found at infosci.otago.ac.nz/careers

## 100-level papers

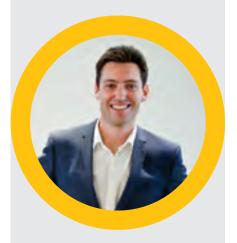
If you intend to major in Information Science, you must initiate your study by taking COMP 101 and COMP 160.

COMP 101 Foundations of Information Systems

An introduction to information systems for the management and exploitation of data and information, and to relational databases.

COMP 160 General Programming

An introduction to the art and craft of computer programming and object-oriented design using Java. A first look at building graphical applications.



## **International Business**

"At New Zealand Trade & Enterprise (NZTE) we grow kiwi companies internationally – bigger, better, faster – for the benefit of New Zealand. I collaborate with our global offices to provide actionable market intelligence for customers. The sheer diversity of my role is exhilarating – I might be helping a luxury fashion brand hit the Japanese market or kick-starting a small technology firm's journey in Silicon Valley."

## Nicholas Peat

Bachelor of Commerce (Marketing) and Master of Business (International Business)
Research Specialist, New Zealand Trade and Enterprise

## 200-level and beyond

At 200-level, Information Science covers techniques used to design, develop and deploy software systems, the role these systems play in creating successful business opportunities, data science, and usability and user experience. By the end of 200-level Information Science, you will have the necessary skills to create information systems. At 300-level, the skills learnt at 200-level are augmented with advanced concepts including decision support, large-scale systems, and information systems strategy and governance. You will also hone your skills in a capstone paper, where you will develop an information system for clients in industry.

## **International Business**

•••••

Business is conducted in a dynamic, global environment. Organisations in New Zealand and overseas need individuals who can apply skills from a range of disciplines as well as work effectively across national borders.

The International Business major equips you to meet this need by combining the study of key business issues from a global perspective (including economics, marketing, management and finance) with language skills and cultural awareness.

If you are keen to work overseas for a multinational enterprise, a BCom in International Business will put you one step closer by providing you not only with essential knowledge of global business, but also the linguistic skills to conduct that business in an international setting.

#### Career opportunities

Career options include: foreign economic relations; international trade and investment; international marketing and business strategy; international management consulting; government departments such as Foreign Affairs and Trade; tourism and hospitality agencies; multinational companies and financial institutions, both in New Zealand and overseas.

## 100-level papers

If you intend to major in International Business, you must complete the BCom core BSNS papers, usually in your first year, as well as approved language or cultural papers (see the Business and Commerce entries for further details).

Note: Depending on your language experience, there is a range of language and/or culture papers available to complement your International Business degree. Visit the International Business website (otago.ac.nz/internationalbusiness) for more details.

## 200-level and beyond

Students at 200- and 300-level take papers in a range of subjects such as Economics, Finance, Management and Marketing, further language courses, including papers in cultural studies related to the language taken, and a business language paper. Students are also encouraged to make the most of opportunities to broaden their horizons through a global exchange with one of the University's 90 partner institutions. These exchanges are a chance to put your language and culture skills to use while studying business papers from a new perspective.



## **Japanese Studies**

Japan is the world's third largest economy and one of New Zealand's largest trading partners.

The University of Otago has research links and student and staff exchange agreements with a number of leading Japanese universities, such as Tokyo, Yokohama National, Keio, Hirosaki and Ochanomizu. Japanese Studies at Otago aims to provide students with a high level of expertise in both Japanese language and culture.

## Career opportunities

Because of the important trade, tourist and cultural links between Japan and New Zealand, graduates with expertise in Japanese language and culture are in high demand by employers in a wide variety of fields, including business, law, government, tourism, journalism, advertising and education.

## 100-level papers

If you have no previous knowledge of Japanese and intend to major in Japanese (BA),\* you must take the following 100-level papers:

## JAPA 131 Introductory Japanese 1

An introductory course in reading, writing, speaking and listening to Japanese for students with no previous knowledge of the language. The paper takes an integrated approach to the skills of language acquisition and includes basic material on the cultural heritage of the Japanese people.

## JAPA 132 Introductory Japanese 2

A continuation of JAPA 131, further developing students' Japanese language skills in reading, writing, speaking and listening at an elementary level. The paper takes an integrated approach to the skills of language acquisition and includes basic material on the cultural heritage of the Japanese people.

Students then choose either ASIA 101 or GLBL 101 or LING 111.

ASIA 101 Introducing Asia

Kung Fu? Sushi? Gangnam Style? Bollywood? Gandhi? Mao Zedong? Pokemon?

What do we really know about Asia? This multidisciplinary course develops students' knowledge and understanding of the Asian region, society, people and cultures.

GLBL 101 Introduction to Intercultural Communication

Understanding communication across cultures: communication styles, interpersonal relationships and intercultural competency.

LING 111 Language and Its Structure

An introduction to the analysis and description of language and its structure: phonetics, phonology, morphology, syntax and semantics.

\*If you have studied Japanese to Year 13 (NCEA Level 3) you should seek special permission to enrol in 200-level language acquisition papers.

## 200-level and beyond

200-level papers develop intermediate speaking, reading, writing and listening skills. Culture papers are in English (no knowledge of Japanese required) and open to non-majors. Japanese life and culture are explored through literary works and films. Students are encouraged to take the Japanese Language Proficiency Test. BA(Hons), and the postgraduate qualifications MA, PGDip and PhD are also available.

JAPA 242 Understanding Japanese Culture (offered in conjunction with JAPA 343)

An introduction to traditional and contemporary Japanese cultures and society.

JAPA 243 Issues in Japanese Culture Today (offered in conjunction with JAPA 343)

An in-depth analysis of some of the major issues of Japanese culture and society today, such as nationalism, regionalism, modernisation and religion.

JAPA 244 Modern Japanese Fiction (offered in conjunction with JAPA 344)

The study of major works of Japanese fiction of the twentieth century in their historical, social and cultural contexts, and also in an East/West comparative perspective.

JAPA 245 Modern Japanese Film (offered in conjunction with JAPA 345)

Japanese film is studied as a window into some aspects of Japanese culture, such as war, peace, family, society, tradition, gender, aesthetics, morals and values.

JAPA 351 The Structure of the Japanese Language

A linguistic analysis of the Japanese language.



# Land Planning and Development

Land planning, land administration and the process of land subdivision have significant impacts on the layout and function of human and natural landscapes. These activities influence the way land is used, patterns of residential development and assessments of the economic potential of land. For some, land also has an important cultural value.

This degree provides an excellent foundation for those wanting a career in planning and resource management, especially in relation to the subdivision and administration of land. It differs from other New Zealand planning degrees in that it emphasises engineering design and land administration, from Pākehā and Māori perspectives, as well as covering essential aspects of New Zealand legislation that relate to land development. It encompasses the practical aspects of planning and planning law.

#### Career opportunities

This is a foundation degree for a career in aspects of surveying that relate to land development. This can lead to work in local government and in surveying and other land development companies.

Note: While this degree is a stepping-stone to a career in surveying and planning, membership of the New Zealand Planning Institute at a professional level currently requires an additional postgraduate qualification. Likewise, to become a full professional member of the NZ Institute of Surveyors, a minimum of a one-year Diploma for Graduates is required.



## Languages

"What can you do when you learn a language? You can take on the world! After graduating from Otago, I worked in Beijing doing public relations for brands such as Mars Chocolate and BMW, and I'm now back in New Zealand working for the Ministry for Primary Industries. Learning a language is challenging - it makes you step out of your comfort zone. But by breaking down linguistic and cultural barriers, you can open doors that may otherwise stay closed and the world becomes your oyster."

## Alba Barrera

Bachelor of Arts (Chinese and Spanish)
Technical Co-ordinator, Market Access Liaison and Co-operation. Ministry for Primary Industries, Wellington

## 100-level papers

If you wish to complete the BSc in Land Planning and Development, you must take the following papers:

MATH 160 Mathematics 1
SURV 101 Introductory Surveying
SURV 102 Geospatial Sciences
ENGL 228 Writing for the Professions

## 200-level and beyond

200-level papers deal with civil engineering, urban design, geographic information systems, land administration, land tenure and Resource Management Act processes.

300-level deals with statutory planning and offers experience in designing residential subdivisions in concept and detailed layout phases. Students can add papers from other degree programmes (such as Geography, Economics or Surveying) to complement their programme of study.

# Language and Linguistics

See Linguistics.

## Languages

The ability to understand people from other countries and being able to communicate interculturally are valued skills on both the domestic and international job market. Studying Languages and Cultures at Otago enables you to gain these skills.

Besides a wide range of majors and minors, Otago also offers both a Diploma in Language and a Diploma in Global Cultures. These Diplomas can be completed alongside your Arts, Commerce or Science degree, all within three years. The Diploma is seven papers, two of which you can cross credit to your degree. In the Diploma in Language, the languages offered are Chinese, French, German, Japanese or Spanish. The Diploma in Global Cultures comprises papers in Global Culture (GLBL) as well as papers in Asian, European and Latin American studies.

See also entries for Chinese, Classics (Greek and Latin), English, French, German, Hebrew, Japanese, Linguistics, Māori Studies and Spanish.

## Latin

See Classics.

Latin papers offer linguistic training and the experience of reading major works of Latin literature in the original language. (For Classical Studies courses taught in English translation, see Classics.) Latin and/or Greek papers constitute an optional component of the major for the BA and BASc and are strongly recommended for the BA(Hons) in Classics (at 400-level). A knowledge of Latin (and/or Greek) is an essential skill required for postgraduate work in Classics.

## 100-level papers

LATN 111 Introductory Latin 1

A reading-based beginners' paper covering the basic elements of Latin grammar and vocabulary, designed to develop reading skills in Latin.

LATN 112 Introductory Latin 2

A continuation of LATN 111, incorporating more advanced grammar and syntax and designed to develop reading skills in Latin. If you have at least 18 credits in NCEA Level 2 Latin (or equivalent), you may enrol for this paper without taking LATN 111.

## 200-level and beyond

Latin papers at these levels focus on improving language skills and reading major texts of Latin literature in the original language. If you have at least 16 credits in NCEA Level 3 Latin (or equivalent), you may be admitted directly to LATN 211.



## Law

"I really loved learning about the law and its many possibilities to shape and mould so many real-life scenarios. The variety of subjects covered means that Otago Law grads have more career options – they aren't restricted to the big legal firms. I have recently completed my professionals course and started working at the Ministry of Justice as Judges' Clerk to the Wellington District Court. My study has been vital in preparing me for my career."

## Franky Maslin

Ngāti Apa, Ngāti Awa Bachelor of Laws and Bachelor of Arts (Politics major, Māori Studies minor) Judges' Clerk, Ministry of Justice, Wellington

## Law

Law permeates all social activity. It defines relationships, protects rights, imposes obligations and gives legal structure to all enterprise.

## Career opportunities

Law is a professional degree with pathways to a conventional legal career as a barrister and solicitor and many other career opportunities. Otago Law graduates work in many areas in New Zealand and overseas. A Law degree from the University of Otago provides knowledge of the law that governs our society and an excellent grounding in skills such as analysing, problem-solving, decision-making, logical thinking, negotiation, researching and forming legal arguments. These skills are in demand in a wide variety of occupations.

Many Law graduates find careers as lawyers in private practice, but others work in business, government, the public sector or welfare agencies. In the commercial world, Law graduates work as legal advisers and company secretaries, in management and in executive positions. Government departments and local bodies employ lawyers for specialist legal advice. Lawyers working in private practice have a variety of fields of law to choose from. These include commercial, property, public, environmental, banking, wills and trusts, family, criminal, sports, media, civil, tax, maritime, intellectual property and medical law.

Over 90 per cent of Law students at Otago take the opportunity to complete double degrees, combining their Law degree with a Science, Arts, Commerce or other degree. This option increases opportunities in areas such as the media, public relations, the entertainment industry, the Ministry of Foreign Affairs and Trade and information technology consultancies. Otago graduates work in law firms all over the world and also in organisations like the United Nations, the International Labour Organisation and Amnesty International.

## 100-level papers

If you intend to complete a four-year Bachelor of Laws (LLB) degree, you must take LAWS 101 (The Legal System) and 72 – 108 additional points at 100-level. For the additional 72 – 108 points at 100-level, no specific papers are required or recommended, but you are advised to include papers from your area of second preference in case you do not gain admission to second-year Law and then wish to go on in another degree. If you wish to do a double degree programme, you should choose the subjects of your intended second degree.

Note: You will need 72 non-Law points to be eligible for admission to second-year Law and a total of 108 before you graduate with an LLB.

#### LAWS 101 The Legal System

A full-year 36-point paper with two examinations at the end of the year. This paper develops your basic skills of legal analysis and legal argument through the study of selected court decisions and legislation. It opens broader perspectives by considering the way cases come to court and the role of law in its historical and social context.

Admission to LAWS 101 is unrestricted, but admission to second-year Law is restricted to 200 places. Students are selected on the strength of their academic record at university, with emphasis on the mark for The Legal System. Under the Alternative Entry category, students who are of Māori ethnicity may apply to have this taken into consideration along with their academic record.

# LAWS 102 Introduction to Law and New Technologies

This paper will introduce students from any discipline to legal issues arising from new technologies. New technologies continue to evolve and challenge conventional legal principles. You will consider whether we need to regulate new technologies and, if so, how to do so. You will be introduced



### Linguistics

"There is a common misconception that people who study linguistics are 'walking dictionaries', or that they speak a lot of languages. But linguistics is more about understanding how language is acquired, how it is structured and how it influences our everyday interactions. My linguistics background was a huge asset for me when I went on to study for a career in speech therapy."

### Joy Kwok

Bachelor of Arts (Linguistics)
Speech Therapist, Department of Education,
Australia

to tricky legal questions about designer babies, the "warrior gene", the criminal mind, genetically modified cows and cyber bullying.

LAWS 102 is not a requirement for the LLB degree, however Law students can count the points towards their non-Law paper requirements. It is listed in the Schedule of Arts and Music papers. It can therefore be credited as an Arts paper for a BA degree or for any other degree that permits an Arts paper to count as part of the degree requirements, such as a non-Science paper for a BSc degree.

### 200-level and beyond

The second-year course consists of five compulsory fundamental papers: Criminal Law, Law of Contract, Property Law, Public Law and Legal Writing. At 300- and 400-levels there are three compulsory papers: The Law of Torts, Jurisprudence, and Legal Ethics. To complete the degree, you need optional full-year or single-semester papers worth the equivalent of six-and-a-half full-year papers (195 points) which you choose from a list of about 40 papers. You also complete a programme of research and writing and a short programme developing the skills of oral advocacy.

#### Honours

Law students of higher ability are offered opportunities to enrol for the LLB (Hons) degree, which involves supervised research in addition to the work required for the ordinary LLB degree.

### Double degrees

By cross crediting papers, a combination of two degrees, such as a four-year LLB and a three-year BSc, BA or BCom can be gained after five years of study. Two four-year degrees, such as LLB and BPhEd, will generally take six years.

### Admission to the legal profession

Law graduates seeking admission as a barrister and solicitor must take a 13week Professional Legal Studies course in Dunedin, Christchurch, Wellington, Hamilton or Auckland (some of which can be done online).

### Linguistics

Language is central and probably unique to human experience, and interest in its study has existed through history. For centuries, questions about language and its nature, structure, use and development have engaged scholars from a wide range of disciplines. Linguistics is the discipline that directly addresses these and other related questions.

Linguistics comprises different areas of specialisation: phonetics, the study of speech sounds; phonology, the study of sound systems; morphology, the study of word structure; syntax, the study of how words are combined into sentences; semantics, the study of meaning; pragmatics, the study of meaning in relation to the way that language is used; sociolinguistics, the study of language in its social context; historical linguistics, the study of language change; linguistic typology, the study of language universals and differences; and applied linguistics, the application of linguistics to the solution of practical problems, e.g. in language teaching.

Linguistics is a useful and rewarding subject for anyone who is interested in languages and in the teaching and learning of second/foreign languages. Linguistics may be usefully combined with the study of a wide range of other disciplines, such as anthropology, literature, education, philosophy, psychology, mass communication, speech therapy, computer science and information science. Although students of linguistics are strongly recommended to study another language, the linguistics programme at Otago University does not assume any prior knowledge of linguistics or of any languages other than English.

### Career opportunities

While linguistics does not provide specific vocational training, you will be trained to use analytic, evaluative and argumentative skills, which are widely applicable in the modern world. Linguistics is a valuable subject for those interested in second-language teaching, interpreting, translating, writing, editing, speech therapy and computer programming. The skills that you will acquire in the study of linguistics can be put to use in diverse kinds of employment once you have graduated. See the entry on the TESOL minor for specific information about teaching English to speakers of other languages.

### Papers in Linguistics

Advanced papers at 200- and 300-level include the study of phonology, syntax, second-language acquisition, TESOL (Teaching English to Speakers of Other Languages), advanced TESOL, and a practicum in TESOL. These papers complement papers in other subjects, including Anthropology, Communication Studies, Computer Science, Education, Information Science, Philosophy, Psychology and papers in individual languages: English, Chinese, French, German, Greek, Hebrew, Japanese, Latin, Māori, Sanskrit and Spanish.

Linguistics major (BA and BASc) – required papers:

### 100-level

LING 111 Language and Its Structure

One additional paper from the following:

LING 112, MFCO 103, MAOR 110, 131

or any 100-level paper from the following:

Chinese, English, French, German, Greek,
Hebrew, Japanese, Latin, Sanskrit, or Spanish

#### 200-level

LING 214 Syntax, LING 215 Phonology and one further LING 200 paper

#### 300-level

Any four LING 300 papers

Language and Linguistics major (BA and BASc) – required papers:

#### 100-level

LING 111 Language and Its Structure Two papers in an approved language (Chinese, French, German, Greek, Japanese, Latin, Māori, Sanskrit, or Spanish)

#### 200-level

LING 214 Syntax, LING 215 Phonology and two 200-level papers in the language taken at 100-level

#### 300-level

Two 300-level LING papers and two 300-level papers in the language taken at 200-level

English and Linguistics major (BA):

#### 100-level

LING 111 Language and Its Structure

Any 100-level ENGL paper (excluding ENGL 126)

#### 200-level

LING 214 Syntax, LING 215 Phonology and any two 200-level ENGL papers

### 300-level

Any two 300-level LING papers and any two 300-level ENGL papers

Linguistics offers a minor in Linguistics and a minor in Teaching English to Speakers of Other Languages (TESOL). (See separate entry for TESOL minor.)



### Management

Great leaders, great entrepreneurs, great business people, even great bosses, all have one thing in common – great management skills.

Management teaches you to understand how people behave in organisations, and the nature of power, influence and leadership. Whether you aim to be self-employed, an entrepreneur, head your own company; or to work for private business, not-for-profit organisations or government agencies – Management gives you the tools for success!

Management skills are used in everything we do, and in every type of job. If you're a "people person", a long-term planner, a deep and meaningful thinker, or a processorientated person, Management at Otago will equip you with skills and knowledge that will kick-start your career and give you greater potential. Because management plays such a vital role in so many different careers, Management is perfect as both a stand-alone degree or to complement other areas of interest.

#### Career opportunities

Recent graduates have taken up roles such as Product Manager, Business Improvement Consultant, Commercial Strategist, Risk Analyst, General Manager, International Sales Manager, Recruitment Consultant and Human Resources Consultants. The opportunities are endless!

### Majoring in Management

If you intend to major in Management, you must complete the following papers and also complete the other BCom core BSNS papers (see the Business and Commerce entries for details):

#### 100-level paper

MANT 101 Managing for Performance

### 200-level papers

MANT 250 Managing People
MANT 251 Managing Organisations

### 200-level and beyond

MANT 250 and 251 give the core set of ideas and knowledge that all Management graduates should know. From there you build on this knowledge with the opportunity to specialise at 300- and 400-level.

### Māori Studies – Te Tumu

Tēnei te mihi atu ki a koutou i roto i ngā tini āhuatanga o te wā.

Māori Studies is an academic programme focused on te ao Māori (the Māori world). Subjects offered include the Māori language, customary lore, history, performing arts, education, politics, research methodology, Ngāi Tahu studies, Te Tiriti o Waitangi (The Treaty of Waitangi) and Māori epistemology.

The immersion Māori language programme consists of courses from 100- to 400-level, and provides a strong foundation for a deeper appreciation of the multidisciplinary subjects listed above.

### Career opportunities

Māori Studies is useful to those who wish to pursue careers as academics, archivists, the diplomatic corps, government officials, iwi development, language planners, librarians, the media industry, ministers of religion, police force, policy analysts, research historians, social workers, teachers and translators. Māori Studies can complement other subjects such as Anthropology, Commerce, Communication Studies, Education, Geography, History, Health Science, Law, Linguistics, Nutrition, Performing Arts, Physical Education, Politics and Social Work.

### Māori Studies major

If you intend to major in Māori Studies (BA or BASc), you must take the following 100-level papers:

MAOR 102 Māori Society MAOR 111 Te Kākano 1 MAOR 112 Te Kākano 2

### 100-level papers

MAOR 102 Māori Society

Introduces the theory and practice of Māori culture and society in traditional and contemporary contexts.

MAOR 103 Introduction to Ngāi Tahu Studies

Introduces Ngãi Tahu society and culture, emphasising their distinctiveness and their role as mana whenua in the Otago region.

MAOR 108 Waiata: Te Timatanga

Introduces various forms of waiata (Māori performing art), including haka from traditional to contemporary times.

MAOR 110 Introduction to Conversational Māori

Introduces Māori language, emphasising pronunciation, greetings and forms of language in cultural contexts.

MAOR 111 Te Kākano 1

A post-introductory paper in Māori language that is taught mainly in Māori. Some previous knowledge of Māori language is essential.

MAOR 112 Te Kākano 2

Development of the skills taught in MAOR 111. Taught in Māori.

### Māori Studies minor

Te Tumu, the School of Māori, Pacific and Indigenous Studies, offers a minor subject for a BA, BPA, BASc, BTheol, BSc, BAppSc or BCom degree.

### 100-level

At least 90 points of MAOR or PACI papers, at least 54 of which must be above 100-level, including at least 18 points above 200-level.

### 200-level and beyond

200-level papers provide greater depth in Māori language, society, history, culture, performing arts, politics, education, Te Tiriti o Waitangi and the Pacific Islands.

300-level papers provide greater focus in particular areas, such as Māori research methodology, epistemology, pedagogy, Waitangi Tribunal, Pacific history and society, and Ngāi Tahu studies.

400-level papers are offered as part of postgraduate diploma and honours programmes.

### Marine Science

Marine Science is available as a minor in any undergraduate degree from Commerce, Humanities or Sciences. Students who are keen on marine biology should look at majoring in Botany, Ecology or Zoology, with a minor in Marine Science.

Marine biologists and ecologists work on marine animal and plant research, coastal resource management issues, marine conservation, and fisheries and aquaculture impacts.

Our recent graduates have found jobs in government agencies (e.g. Ministry for Primary Industries, Department of Conservation), Crown Research Institutes (e.g. National Institute of Water and Atmospheric Research, Institute of Geological and Nuclear Sciences), regional councils and in the private sector.

#### 100-level paper

The 100-level paper in Marine Science is MARI 112 Global Marine Systems.

Students should also consider taking EAOS 111 Earth and Ocean Science, taught jointly by the departments of Marine Science and Geology.

### 200-level and beyond

At 200- and 300-level Marine Science offers a wide range of papers in Marine Science (MARI), Aquaculture and Fisheries (AQFI) and Oceanography (OCEN).

Other departments offer Marine Science-related papers (e.g. GEOL 263 Fossils, Strata and Hydrocarbon Basins; GEOL 373 Sedimentary Processes and Materials; ZOOL 221 Animal Designs for Living). A multidisciplinary degree such as this provides a foundation for postgraduate study in Marine Science.

Marine Science postgraduate courses are open to students with a Bachelor of Science in related disciplines such as Zoology, Botany, Microbiology, Chemistry, Physics, Mathematics and Geology. Some training in Mathematics and Statistics is required.

### Marketing

Marketing looks at the world from the point of view of companies and consumers. Therefore, it's important to understand how companies can work to satisfy consumer needs and wants, in a world full of an everincreasing variety of goods and services. At the same time, Marketing needs to recognise that consumption contributes to the depletion of resources and an increase in social inequalities. Its role, therefore, is to help consumers and producers work together for the common good of society.

### Career opportunities

Who uses Marketing? Everyone does. Marketing influences just about every industry and organisation you can think of, including professions such as accounting, law, medicine, engineering and the sciences, providing them with an essential commercial perspective and an understanding of the importance of building honest and mutually beneficial relationships.

Marketing is people-oriented and it offers careers that are exciting, challenging and rewarding. As Otago's courses are broadbased, our graduates are well equipped to work in a large variety of roles in organisations large and small, ranging across private, public and not-for-profit sectors.

### Majoring in Marketing

To major in Marketing (BCom), you must successfully complete the following papers (and also meet the BCom degree requirements including the completion of all BCom core BSNS papers — see the Business and Commerce entries for details):

#### 100-level

BSNS 112 Interpreting Business Data MART 112 Marketing Management

### 200-level

MART 212 Understanding Markets and two of

MART 201 Integrated Marketing

Communications

MART 210 Consumer Behaviour

### MART 211 300-level

MART 301 Strategic Marketing Management and any three other 300-level Marketing papers

Products to Market

You can combine Marketing with a wide range of other subjects by incorporating a second major subject into your Bachelor of Commerce degree (double major), or by completing a double degree. Here are a few examples of how to plan for your future by including other subjects:

- Marketers may choose finance, accounting, management or economics
- International marketers may consider a foreign language
- Behavioural marketers could consider psychology, sociology or anthropology
- Food marketers often include food science and nutrition
- Quantitative market researchers might add mathematics or statistics
- Creative marketers will benefit from papers in media, communications or English
- Qualitative researchers might add anthropology or sociology.



### Marketing

"Working for a company like Beaurepaires that is 100% Kiwi-owned and operated is really rewarding. It took me a couple of months to understand the complexities of the tyre industry, but I love how every day brings a different marketing challenge and opportunity for success. Today I might post to social media, monitor sponsorship requests, or liaise with our stores around New Zealand about a new marketing initiative. And tomorrow ... who knows?"

### Komal Achari

Bachelor of Commerce (Marketing and Management) Marketing Assistant, Beaurepaires

### **Mathematics**

Otago's Department of Mathematics and Statistics has New Zealand's top-ranked research group in pure and applied mathematics. Otago mathematicians have a high international and national profile. They also maintain collaborations with researchers in the medical school and across the Division of Sciences. We also maintain strong links with local and national industry.

The Department offers comprehensive graduate and undergraduate programmes in Mathematics. The undergraduate programme introduces students to all major areas of mathematics, from applications to analysis, from modelling to relativity, from algebra to computation. Otago Mathematics majors go on to careers in a wide range of areas. Many go on to graduate study at Otago or their choice of top-ranking universities internationally.

Skills in Mathematics are central to many disciplines, and the Department offers service papers at the 100-level and 200-level. We work closely with other departments to keep these relevant and engaging.

The core 100-level MATH papers form a sequence MATH 151, MATH 160, MATH 170. Those students who have passed multiple NCEA calculus or statistics standards should consider enrolling directly into MATH 160 while those with very good grades may consider enrolling directly into MATH 170. We have developed a number of tools and (anonymous) placement tests to help you decide which of 151, 160 or 170 is best for you: see maths.otago. ac.nz/?whichmath for details.

Exceptional students may gain direct entry into second year, subject to approval by the Head of Department. Anyone in doubt about which course to take is welcome to come and talk with an adviser.

Mathematics majors are required to take 18 points of Statistics, usually STAT 110, STAT 115 or STAT 261 and are encouraged to take COMO 101, an introduction to mathematical modelling and computation.

For more information on 100-level papers contact either Dr Jörg Hennig or the Mathematics and Statistics office.

### 100-level papers

The core 100-level MATH papers form a sequence:

#### MATH 151 General Mathematics

This paper covers topics such as basic mathematical models, operations research, introductory calculus, exponentials and logarithms, compound interest, exponential growth and decay, and simple integration. It provides excellent preparation for students wishing to take MATH 160.

#### MATH 160 Mathematics 1

This paper develops and extends material introduced in MATH 151. The paper is divided into algebra and calculus (which can be taken as separate 9-point papers). The algebra component introduces vectors and geometric constructions fundamental to applications in mechanics and computer graphics. Matrices, polynomials and complex numbers are introduced. The calculus component covers ideas and methods of differentiation and integration together with key applications and extensions.

#### MATH 170 Mathematics 2

This paper builds on MATH 160 and provides essential preparation for 200-level mathematics. The paper is divided into algebra and calculus components (which can be taken as separate 9-point papers). The algebra component expands on the material on matrices and vectors discussed in MATH 160. This is followed by a section on discrete mathematics and counting techniques. The calculus component covers sequences and series, special functions, advanced integration techniques and finishes with an introduction to differential equations and their applications.

### **Medical Laboratory Science**

For details of the Health Sciences First Year (HSFY) course for Medical Laboratory Science, see page 97.

The four-year Bachelor of Medical Laboratory Science (BMLSc) degree qualifies you as a medical laboratory scientist. Graduates may become registered scientists for diagnostic laboratory-based employment, or enter into research and postgraduate study (e.g. Master of Medical Laboratory Science (MMLSc) and PhD).

### Career opportunities

Most graduates start working in a diagnostic pathology laboratory and achieve full registration by the Medical Sciences Council after six months' full-time work.

Thereafter, opportunities exist in diagnostic laboratories, particularly in New Zealand, Australia and the UK. The degree is accredited by Australian authorities, and UK registration is also possible.

#### Admission

Admission to second-year classes in Medical Laboratory Science requires you to pass all HSFY papers with a B- (65%) grade point average (GPA) or better.

Competitive entry to second-year classes normally follows the HSFY course.

If you have two years' relevant study, or are a graduate with relevant papers in your degree, you may also apply for entry to second year.

All applications for admission must be made by 15 September of the preceding year. Late applications may be considered subject to availability. For a copy of the application form contact:

Health Sciences Admissions Office Email health-sciences@otago.ac.nz

### 200-level and beyond

Degree subjects after admission are: Anatomy, Biochemistry, Microbiology, Physiology, Immunology, Diagnostic Pathology, Principles of Pathology, and Clinical Pathology including Diagnostic Chemical Pathology, Medical Microbiology, Histotechnology, Cytopathology, Haematology and Transfusion Science.

In fourth year, you'll specialise in two of the following: Chemical Pathology, Clinical Microbiology, Clinical Virology, Diagnostic Molecular Pathology, Cytopathology, Haematology, Histopathology, Transfusion Science and Clinical Immunology. You'll study under supervision in an approved diagnostic pathology laboratory.

### Medicine

Medicine at the University of Otago Medical School is a six-year degree programme (Health Sciences First Year plus five years). You'll graduate with a Bachelor of Medicine and Bachelor of Surgery (MB ChB) degree.

Note: Health Sciences First Year (HSFY) can be taken only once and, for school-leavers, it should be taken in your first year of university study: see page 97.

### 200-level and beyond

After admission to Medical School, you'll complete the Early Learning in Medicine (ELM) programme (second and third years) in Dunedin, learning about the foundation biomedical sciences and the normal and abnormal function of body systems. You'll be introduced to practical aspects of clinical medicine, including learning of clinical skills.

Individual development, social influences on health and illness, hauora Māori, and the role of the doctor are also covered.

These 200- and 300-level years include: Body Systems modules including Musculoskeletal System, Cardiovascular System, Respiratory System, Metabolism and Nutrition, Gastrointestinal, Renal, Nervous System, Endocrine, Reproduction Development and Ageing, and Regional and Clinical Anatomy. Alongside you will study modules about: Blood, Genetics, Infection and Immunity, Cancer, Pathology, Pharmacology, Psychological Medicine, Professional Development, Bioethics, Evidence-Based Practice, Hauora Māori and Public Health, Palliative Medicine and End of Life Care. Modules across all these areas include Clinical Case-Based Learning, Clinical Skills and Early Professional Experience. In both years, your progress is assessed within each of the above learning modules, as well as by formal written, clinical and practical examinations at the end of each year.

The Advanced Learning in Medicine (ALM) programme (fourth, fifth and sixth years) is completed at one of the University of Otago Medical School campuses in Dunedin, Christchurch, or Wellington. There are also placements in regional and rural areas. The focus of these years is on learning and training in hospital wards, in general practices and other community settings.

As far as possible, you'll be placed according to your campus of choice, but occasionally it is necessary to direct students in order to balance numbers. This also applies to periods (up to a year) in regional and rural areas. You'll need to be prepared to relocate over your period of study in the programme. All campuses are part of the University of Otago Medical School, and accordingly, the courses are similar and share common exit assessments at the end of fifth year.

The fourth year is divided between clinical work in the community and on wards and lectures, tutorials and clinical presentations in which common human illnesses are systematically studied.

In the fifth year, most of the time is spent on wards or in the community interviewing and examining patients and in clinical problem-solving. There are also projects in population health.

The sixth year is called the trainee intern (TI) year, because it is an apprenticeshiptype of course in preparation for the intern (house surgeon) years that follow. You'll be attached to clinical units, where you'll carry out duties as a member of a hospital or a community-based health-care team. You'll be assessed by supervising clinicians throughout the year, and usually wouldn't be required to sit any formal end-of-year examinations. Successful students graduate with an MB ChB degree in December.

### Rural Medical Immersion Programme

As well as the rural experience that all students have, 20 students are selected to undertake their entire fifth year in the rural immersion programme. If selected, you'll be based in a rural district such as Southland, Clutha, Westland, Marlborough, Tararua, or Wairarapa. If you apply for admission to Medicine through the Rural Origins sub-category, you may be required to participate in this rural immersion programme.

#### Research

The Otago Medical School strongly encourages research interests for students studying Medicine. If you have a special interest in research and a sound academic record, you may interrupt the Medicine course for one year at the end of your third or fifth year, to follow a research topic and graduate with a BMedSc(Hons) degree, then resume your studies for the MB ChB. In some cases, you may be permitted to upgrade to PhD studies and complete both the MB ChB and PhD degrees as an integrated programme.

### After graduation

MB ChB graduates must complete the preregistration requirements of the intern year working in an approved hospital before the



### Medicine

"I went into Health Sci totally focused on gaining a spot in Medical School – it's all I've ever wanted to do. I see myself being a doctor in a fast-paced, high-pressure setting. And I see my work being here in New Zealand – we've got lots to do in our own backyard. I haven't regretted choosing medicine for a second; it's exciting walking into class, or going to the hospital, every day."

### Jordan Tewhaiti-Smith

Ngāti Kahungunu ki Wairarapa; Ngāti Raukawa (Horowhenua/Manawatū); Kai Tāhu Studying towards a Bachelor of Medicine and Bachelor of Surgery Medical Council of New Zealand grants full registration. There are limited, if any, places available for international students who will normally complete registration requirements in their home country.

### Career opportunities

Graduates work in many kinds of clinical specialties, public health or in research, in teaching and in administration.

If you enter clinical practice (as most medical graduates do), society has expectations of you. One is that you are, and remain, technically competent in your field of practice; another is that you treat patients with patience, kindness and humanity; and further, that your ethical behaviour and rapport with your patients is such as to enable them to put their trust in you with the problems of their minds and their bodies.

### Admission

There are three categories of admission: the HSFY category, the Graduate category, and the Alternative category. Admission to Medicine is competitive, and places are currently limited to 282 domestic students—of which 50 places are reserved for students wishing to apply under the New Zealand Rural Origins subcategory. Students who meet the criteria may wish to apply under the Māori and Indigenous Pacific sub-categories. There are a limited number of additional places for international students, primarily by contract with overseas governments. Private international students please enquire to the International Office.

Most medical students (approximately 70%) gain admission to second-year medicine through the HSFY category of admission.

Applications through the HSFY and Graduate categories of admission must be submitted by 15 September in the year preceding that to which admission is sought, and by 1 May of the preceding year for the Alternative category.

You are advised to read the appropriate admission regulations, which are available in the *University Calendar*.

All second-year medicine applicants are required to declare any health conditions or impairments, in case they seriously affect their professional training in Medicine. They must also declare any charges of criminal offending, including drink-driving, and any disciplinary proceedings of a tertiary institution or professional body as this may affect their subsequent registration by the Medical Council of New Zealand.

### Health Sciences First Year category of admission

HSFY provides you with the necessary preparatory learning to broaden your educational background (see entry under HSFY page 97.)

Admission to the HSFY programme is open entry. If seeking admission to Medicine from the HSFY programme, you are required to pass all papers in HSFY with a mark of 70% (B) or better and have a current UMAT (Undergraduate Medicine and Health Sciences Admission Test) result.

### Graduate category of admission

If you have completed your first degree at a New Zealand university within the past three years and have a current UMAT, you may apply for entry under this category. Contact the Health Sciences Admissions Office for information (see page 97).

### Alternative category of admission

Allied health professionals, those with health professional experience, and mature graduates (NZ degrees completed more than three years ago, or degrees from overseas universities) may apply under this category. Contact the Health Sciences Admissions Office for information.

#### Sub categories

### Rural

If you have a rural New Zealand upbringing and/or education, you may

apply under the Rural Origins subcategory through HSFY, Graduate Entry or Other categories. Contact the Health Sciences Admissions Office for information.

#### Māori and Pacific Islanders

If you wish to apply under these subcategories, you're required to provide an endorsed whakapapa or island of heritage/ origin form, along with a supporting statement.

### **Microbiology**

Also see Immunology.

Microbiology is the study of microscopic organisms (bacteria, viruses, fungi and protozoa). Microbes are best known as the causative agents of infectious diseases, but in fact they're essential to the complex biochemical and geochemical networks that sustain our planet. They're used in producing foods such as cheese, wine and beer, as well as in many pharmaceutical, chemical and agricultural products.

Microbes comprise more than 50% of the life forms on Earth, yet only around 1% have been identified and studied. Current research is revealing the vast reservoir of untapped knowledge of the microbial world, showing huge promise for many exciting new discoveries in the 21st century. As one of the core biological sciences, microbiology is at the forefront of research into life processes.

### Career opportunities

Ongoing technological advances in fields such as biotechnology, agriculture, aquaculture, molecular biology, food technology, microbial genetics and genomics, immunology, and medicine mean that demand for microbiologists is increasing every year. The range of job opportunities continues to expand and diversify. For example, microbiologists are employed in medical and veterinary laboratories, food and biotechnology companies, universities and government agencies.

#### 100-level

If you intend to major in Microbiology (BSc), your degree must contain the following 100-level papers or their equivalent:

CELS 191 Cell and Molecular Biology
CHEM 191 The Chemical Basis of Biology
and Human Health
HUBS 191 Human Body Systems 1

#### 200-level

The three 200-level Microbiology papers (MICR 221 Microbes to Medicine, MICR 222 Microbes in Action, and MICR 223 Infection and Immunity) introduce you to microbes, infectious diseases and the role of microbes in environmental and industrial processes. Topics covered include medical microbiology, virology, immunology, microbial plant and animal interactions, biotechnology and environmental microbiology. GENE 221 Molecular and Microbial Genetics is also needed in a Microbiology major.

#### 300-level

At 300-level you need at least four of the six core Microbiology papers offered for a Microbiology major. These are Food Microbiology (MICR 331), Health Microbiology (MICR 332), Advanced Immunology (MICR 334), Molecular Microbiology (MICR 335), Applied and Environmental Microbiology (MICR 336) and Virology (MICR 337).

#### BBiomedSc programme

An Infection and Immunity major within the Biomedical Sciences (BBiomedSc) degree programme is available. This degree structure is essentially similar to the BSc programme, but has a broader biomedical base at 100-level with 200- and 300-level papers being orientated towards medical microbiology and immunology. Two Microbiology papers are required at 300-level: Health Microbiology (MICR 332) and Advanced Immunology (MICR 334).

### BAppSc programme

Microbiology papers (CELS 191, HUBS 191, MICR 221, MICR 336, selected 400-level papers) are core contributors to the programme.

### **Molecular Biotechnology**

Molecular Biotechnology represents one of the pivotal driving forces for the development of new products and systems in the new millennium. There is a worldwide demand for well-trained biotechnologists and graduates who have a sound scientific grounding in molecular biology, biochemistry, genetics, cell biology or microbiology. Molecular Biotechnology links the biological sciences with emerging technologies to provide the basis for discovery and innovation of new products and services. The demands for graduates in Biotechnology are increasing to match the rapid scientific advances and new developments taking place in bioinformatics, genomics, proteomics and recombinant DNA technologies, which are underpinning the current growth in Biotechnology.

If you are interested in a career in molecular biotechnology, contact the programme director, Professor Julian Eaton-Rye (julian.eaton-rye@otago.ac.nz).

#### 100-level papers

If you intend to major in Molecular Biotechnology in the BAppSc degree, you must take the following 100-level papers:

Papers worth at least 120 points including:
BIOC 192 Foundations of Biochemistry
CELS 191 Cell and Molecular Biology
CHEM 191 The Chemical Basis of Biology
and Human Health
HUBS 191 Human Body Systems 1

### 200-level and beyond

Papers in Biochemistry, Genetics and Microbiology form the core Molecular Biotechnology courses for the second year



### Music

"For many people music is a way of life – a way of expressing ideas, storytelling, creating. At Otago you develop so many skills that craft you into the ultimate musician while being given the space to evolve your own style. The lecturers support and nurture your talent. Whether composing a fourpart harmony or playing shredding guitar solos, the expertise of the teaching staff was the reason for my success as a musician."

### Tecwyn King

Ngāi Tahu / Kai Tahu

Bachelor of Music (Contemporary Music Performance, Music Studies) Master of Teaching and Learning (Secondary Education)

Head of Music, Stratford High School

of the programme. Advanced course topics in the third and fourth years provide the opportunity to specialise in specific areas according to your personal interests.

As part of your degree you will specialise with a minor in a subject of your choice from an approved list of options.

.....

### Music

The Department of Music offers courses in several areas, including Western classical music and contemporary popular music. Students can take a three-year BA or a more specialised MusB degree, or a four-year MusB (Hons) degree, in the following broad areas: musical scholarship, classical performance, contemporary rock performance, composition and songwriting, music technology, recording and production, industry studies, world music and popular music. The MusB structure enables students to have a minor from another subject area if they wish, and an optional endorsement in one or two of the areas of musical specialisation listed below within their MusB degree.

The three optional areas of endorsement with the MusB majors are:

MusB Endorsed in Performance (classical or contemporary)

MusB Endorsed in Composition

MusB Endorsed in Studio Production

All MusB degrees shall include the following required papers:

MUSI 101, 201 and one of MUSI 102, 103, 104

The Department offers minors for most other degrees but not within the MusB. These are in Classical Music, Ethnomusicology, Popular Music, Music Industry, Music Technology, and Music. Students wishing to take performance papers need to apply to the Music Department who will organise an audition.

Many papers are available as part of a BA or BASc.

### Career opportunities

Graduates may become performers, teachers or composers. Some work in the media or the music industry. These are just a few of the many possibilities.

### 100-level papers

MUSI 101 Materials of Music 1

A foundation for study in all areas of music, dealing with its basic building materials, including keys and harmony, musical form, rhythm and the analysis of music.

MUSI 102 Music in Western Culture
An exploration of aspects of Western
classical music in its cultural context, from
the Middle Ages to the present day.

MUSI 103 Music in Popular Culture

A consideration of the significance of the many forms of popular music, and an investigation of theories of popular culture as they relate to music.

MUSI 104 Music in World Cultures

An exploration of the world's traditional, popular and contemporary music in its cultural context, including music from Africa, South America, Asia, Australasia, North America and Europe.

### MUSI 131 Composition 1

A paper which leads towards the production of a number of notated compositions, including works for voices, instrumental ensembles and a project in film music.

MUSI 132 Music Technology

A practical introduction to musical technology, providing experience in computer sequencing and sampling.

MUSI 133 Sight and Sound

This Summer School paper explores the creative interfaces of multimedia applications of music and video software. The emphasis is on the creative process rather than mere software skills acquisition. The paper is taught by both Music and Film Studies staff and utilises Apple Mac computers in the lab.

#### MUSI 135 Songwriting

A paper providing students with the fundamental skills necessary to write popular songs, including lyric writing, song structure and basic composition techniques.

MUSI 140 Performance Studies 1 (entry by audition)

An 18-point paper providing individual tuition in performance skills in Western classical music or contemporary music.

MUSI 140 Performance Studies in World Music Ensemble

An 18-point paper in which students learn to play traditional instruments in one of the department's world music ensembles (Gamelan orchestra, Taiko drumming, Taonga Puoro). No prior musical experience is necessary.

MUSI 141 Performance 1 (entry by audition)

A 36-point paper developing technical and interpretative skills in the performance of Western classical music through individual tuition and workshops.

MUSI 146 Professional Practice 1A (entry by audition)

An 18-point paper that focuses on technique and repertoire that develops stylistic diversity in a band context on your chosen instrument within a wide range of contemporary idioms (leads to MUSI 156 in second semester).

#### MUSI 185 Music Industry

An introduction to the business procedures used by managers, lawyers, agents, promoters and record companies.

MUSI 191 Introduction to Music

A beginner's guide to the notation, rudiments and theory of music, including elementary analysis and harmony. If you have no theoretical knowledge of music, or your knowledge is a bit rusty, you should take this paper in your first semester.

If you are seeking entry into MUSI 140 Performance Studies, MUSI 141 Performance 1, or MUSI 146 Professional Practice 1A, contact the Secretary of the Music Department, preferably before 1st September, to arrange an application for audition (forms are available on the Department's website). For entry into MUSI 140 and MUSI 141 (excluding World Music instruments), instrumental candidates have usually reached Grade 8 level. Candidates in voice are not expected to have passed grade examinations, but are required to show potential as singers. Candidates for MUSI 146 should have some experience as performers.

### 200-level and beyond

There are papers in Western classical music performance, composition, musical history, musicology (the scholarly study of Western classical music) and ethnomusicology (the scholarly study of world music), as well as in popular music studies, contemporary music performance, songwriting and music technology.

Full details of papers and activities appear on the website of the Department of Music, otago.ac.nz/music and its Facebook site ("University of Otago Music Department"). Please browse these sites regularly for updates. You are welcome to contact the Department staff with your questions.



### **Nautical Studies**

This subject will appeal to those interested in working on the water, such as students of hydrographic surveying, marine science and outdoor recreation. By the end of the two Nautical Studies papers, students should be able to work as a team in taking a small vessel to sea and bringing it safely home again.

### Career opportunities

NAUT 101 provides a solid background for careers in hydrography, ocean research, aquatic tourism, fishing, shipping and port management. It is a good start for those wanting to skipper commercial vessels, although such a qualification in New Zealand may be obtained only after extended service at sea, and licensing prerequisites apply.

### 100-level paper

NAUT 101 Nautical Studies

Introduces seamanship, navigation, safety and survival at sea, and maritime legislation as it applies to the operation of small inshore vessels.

### 200-level and beyond

NAUT 201 is available to any student who has passed NAUT 101. It includes the study of weather, climatology, seamanship and pilotage from the perspective of professional support staff on larger vessels, and will be helpful for those considering ocean surveying, marine research, exploration, fisheries and oceanographic work.

### **Neuroscience**

Neuroscience is the study of the nervous system, including the brain, spinal cord, and the network of neurons that transmit signals around the body. You will study normal nervous systems as well as situations in which the nervous system does not work properly. Problems studied include mental illness, neurodegeneration (e.g. Alzheimer's or Parkinson's disease), and brain injury (such as from a stroke or a car accident).

Neuroscience is a subject in its own right, but you can also think of it as being made up of the "neuro" part of each of a wide range of other subjects, including Anatomy, Physiology, Psychology, Biochemistry, Genetics, Zoology, Chemistry, Computer Science and Pharmacology. The University of Otago is the only New Zealand university that offers an undergraduate major in Neuroscience. There are also opportunities for keen postgraduate students to work with the many internationally-recognised Neuroscience researchers at Otago.

### Career opportunities

A BSc or BASc majoring in Neuroscience prepares you to work as a laboratory technician, research assistant, research manager, or policy analyst. It also provides a convenient first degree if you want to later specialise in professional or applied fields such as medicine, pharmacy, physiotherapy, optometry, audiology, or nursing. You may also enter the general scientific or business workforce, as employers value the generic skills acquired while studying science.

Students who complete a PhD in Neuroscience are sought after for research positions in academic or industrial settings, such as universities, research institutes and biotechnology companies.

#### 100-level papers

For a Bachelor of Science majoring in Neuroscience, you must complete the following 100-level papers:

CELS 191 Cell and Molecular Biology HUBS 191 Human Body Systems 1

PSYC 111 Brain and Behaviour (can be taken in the second year)

and at least two of

BIOC 192 Foundations of Biochemistry

CHEM 191\* The Chemical Basis of Biology and Human Health

HUBS 192 Human Body Systems 2

or

BIOL 112 Animal Biology

PHSI 191\* Introduction to Physics

\* You must complete at least one of either CHEM 191 or PHSI 191. Taking CHEM 191 will give you more options in future years. We recommend that if you have not studied Chemistry to Year 13 at school, you should take the paper CHEM 150 in the summer school at the beginning of your studies to prepare for CHEM 191.

You can choose from a range of papers depending on your intended area of specialisation within Neuroscience, which allows you to craft a degree that fits with the areas that most interest you.



### Oceanography

Oceanography is a major in the BSc and BASc programmes. It can also be added as a minor to any undergraduate degree from Commerce, Humanities or Science.

Oceanography is the study of the physical side of the sea – currents and waves, chemistry and models, sediments and ocean basins. There is widespread demand for students who understand physical, chemical and geological processes in the sea, and are able to measure, analyse and model these processes. This degree is best suited to students with a strong interest in Maths, Physics, Chemistry and/or Geology.

### Career opportunities

A degree in Oceanography leads to careers as managers, navigators, modellers and scientists. Opportunities arise in the fishing industry, in regulatory organisations such as the Ministry for Primary Industries, and in research institutes, conservation groups or private companies.

#### 100-level papers

The required 100-level paper for Oceanography is MARI 112 Global Marine Systems. Remaining papers can be taken from a wide range of options, including these strongly-recommended papers:

COMO 101 Modelling and Computation
EAOS 111 Earth and Ocean Sciences
MATH 160 and MATH 170 Mathematics 1 & 2

At higher levels, OCEN 201 Physical Oceanography is required, with a broad range of options for the other papers to build your major so that it fits with your interests and abilities.

Marine Science postgraduate courses are open to students with a Bachelor of Science in related disciplines such as Oceanography, Zoology, Botany, Microbiology, Chemistry, Physics, Mathematics and Geology. Some training in Mathematics and Statistics is required.

### **Oral Health**

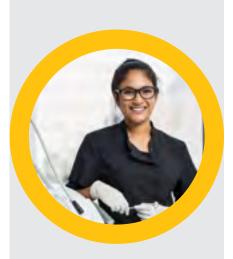
The three-year Bachelor of Oral Health degree focuses on dental hygiene, dental therapy, and oral health promotion. Your clinical skills will develop over the three years, as well as opportunities to advance health promotion skills, particularly in relation to oral health. As an Oral Health graduate you can register to practise in New Zealand and Australia, as either a dental hygienist, dental therapist or an oral health therapist.

### Career opportunities

You can practise in private dental practices, orthodontic practices, community-based clinics, iwi-based clinics and hospital dental clinics. You can continue with postgraduate study and research, through Master of Oral Health, Master of Health Sciences, Master of Public Health and PhD degrees.

#### Admission

Entry is competitive. To be admitted to the programme you must be eligible to attend university and have attained a high standard in NCEA Level 3 Biology and English or a recognised equivalent. Your online application is made through the Health Sciences Admissions Office website – otago.ac.nz/healthsciences – from early August and closes on 15 September of the year preceding enrolment.



### Oral Health

"Being Samoan, I want to contribute to making a change in the area of Pacific Island Health — it's an area that could be greatly improved. Oral health is the gateway to overall health, and changing the little things in people's daily routines can really impact their lives. It's great to meet up with patients over time and see how much you've helped them improve their health."

### Janine Jattan

Bachelor of Oral Health and Bachelor of Science (Chemistry)

Oral Health Therapist, Wellington

### 100-level papers

DEOH 101 The Body and its Environment DEOH 102 The Oral Environment: Health

and Disease

DEOH 103 Oral Informatics

DEOH 104 Clinical Oral Health Practice

MAOR 102 Māori Society

These papers will give you the background knowledge and skills to progress to secondyear clinical practice.

### 200- and 300-level and beyond

You will study human disease and pharmacology, clinical oral health practice, New Zealand society, health promotion, and be involved with research.



### **Pacific Islands Studies**

Pacific Islands Studies is a programme focusing on the Pacific Islands taught across several departments. Papers cover topics of contemporary issues on climate change, environment, gender, land, health politics, performing arts and urbanisation, as well as Pacific prehistory, Pacific history and religion. These papers make up a unique programme with a multidisciplinary orientation that enables students to analyse contemporary issues of importance to Pacific peoples.

The programme covers the geographical area contained within the Polynesian Triangle defined by Hawai'i, Rapa Nui and Aotearoa as well as the islands of Melanesia and Micronesia. The focus of the course acknowledges New Zealand's location within the Pacific and examines changing attitudes and approaches by Pacific countries themselves as they seek relationships with more countries on the Pacific Rim.

Pacific Islands Studies can be taken both as a major and minor subject within the Bachelor of Arts, and combines well with other papers from a wider range of subjects including Anthropology, Sociology, Geography, Media, Indigenous Development, History, Māori Studies and Tourism. One optional paper for Health Science is offered, providing a good understanding of the Pacific for anyone planning to work in the health sector.

### Career opportunities

Pacific Islands Studies is useful to those who wish to pursue a career in national and regional organisations, diplomatic corps, non-government organisations, as government officials, teachers, doctors and dentists, ministers of religion or social workers. It can also complement other academic subjects, including Anthropology, Geography, Commerce, Education, Tourism, History, Health Science, Law, Nutrition, Māori Studies, Physical Education, Politics and Social Work.

### 100-level papers

If you wish to major in Pacific Islands Studies for a BA or BASc you must study:

PACI 101	Pacific Societies
and one of:	
PACI 102	Pacific Dance
PACI 103	Language and Cultures of the Pacific: An Introduction
ANTH 103	Anthropology, Culture and Society
ANTH 105	Global and Local Cultures
HIST 107	New Zealand in the World
MAOR 102	Māori Society
MFCO 102	Understanding Contemporary Media

There is also the option of selecting Pacific Islands Studies as a minor.

#### 200-level

PACI 201 or PACI 210; one of ANTH 205, ARCH 204, GEOG 278, HIST 208, MAOR 207, MFCO 212, MUSI 228, or approved Special Topic papers relevant to the Pacific Islands in ANTH, ARCH, ARTV, CHTH, GEOG, HIST, MAOR.

#### 300-level

One of ANTH 316, GEOG 378, HIST 337, INDV 307, MAOR 307, MUSI 328, PACI 301, PACI 310, POLS 320, SOWK 304, or approved Special Topic papers relevant to the Pacific Islands in ANTH, ARCH, ARTV, CHTH, GEOG, HIST, MAOR.

### 100-level papers

PACI 101 Pacific Societies

An introduction to Pacific societies in traditional and contemporary contexts, with a focus on indigenous perspectives. The paper is taught by a team of experienced researchers and practitioners. It offers a good overview of the Pacific over time and into the 22nd century.

PACI 103 Language and Cultures of the Pacific: An Introduction

An introduction to the Fijian language and culture.

ANTH 103 Anthropology, Culture and Society

An introduction to concepts of Anthropology and its approaches to the study of culture and society.

ANTH 105 Global and Local Cultures

An introduction to anthropological ethnographies and conceptual frameworks of contemporary cultural and social issues, both globally and locally.

MAOR 102 Māori Society

An introduction to Māori culture and society in traditional and contemporary contexts.

MFCO 102 Understanding Contemporary Media

An introduction to the historical framework of media studies and contemporary discourses that define the discipline.

### 200-level and beyond

PACI 201 Contemporary Pacific Islands

Examines contemporary social, political and economic issues affecting Pacific peoples living in the vast Oceanic region known as the Pacific. Focus on urbanisation, land, poverty, climate change and social issues.

### 300-level and beyond

PACI 301 Gafa o Tagata Pasifika: Pacific Diaspora in New Zealand

Examines Pacific people's interaction with Māori and Pākehā in New Zealand with regard to issues such as identity, culture, spirituality, education and contemporary music.

PACI 310 Pacific Bodies

Examines perception of body images within the Pacific.

Other papers at 200- and 300-levels in Anthropology, History, Geography, Music, etc., continue the themes developed during first year.

### 400-level papers

Students can continue their Pacific Islands Studies at honours level, or undertake a postgraduate diploma.

### **Performing Arts**

Otago's Bachelor of Performing Arts is a unique degree introduced in 2014. This distinctive, exciting collaboration between the university's programmes in Theatre, Music and Dance gives students a rare opportunity to study more than one performing art form – music, theatre and dance – within a single university degree.

Students will be guided to develop their knowledge and skills in areas such as acting, dance, directing, devising, bicultural theatre, music performance (singing or instrument), composition, songwriting, technical production and the theoretical foundations of theatre, music and dance.

The Bachelor of Performing Arts degree is a three-year full-time course of study. It is made up of a minimum of 20 papers.

Bachelor of Performing Arts students will train and perform in a fully equipped theatre as well as music and dance studios and performance spaces.

### Career opportunities

Graduates of the degree will be able to pursue careers in a wide range of performance forms and styles, as well as in performing arts-related education, media and other similar fields.

The performing arts programme enables the development of a range of skills. While the skills and knowledge gained will prove invaluable for those desiring a career in musical/theatrical forms and performing arts education, they are equally useful for many career paths.

Cultural knowledge and skills gained through creative practice and historical and theoretical study are valued, for example in journalism, advertising, marketing, law, medicine and many other occupations.

Students will develop many generic skills employers seek, including teamwork and leadership, effective oral and written communication, analysis, critical evaluation and problem-solving, organisational skills and time management.

### 100-level papers

or

Students must take the following 100-level papers:

	0 0 11
MUSI 101	Materials of Music 1
THEA 122	Drama on Stage and Screen
THEA 151	Improvisation
THEA 153	Voice and Movement
one of	
PHSE 115	Fundamentals of Dance
or	
PHSE 116	Elements of Dance
either one of	
MUSI 131	Composition 1 (students must be able to read and write music)
MUSI 135	Songwriting
MUSI 146	Professional Practice 1A (audition required)
MUSI 156	Professional Practice 1B is also required if you wish to continue study in this area into second year
PERF 102	Musical Theatre Voice 1A

MUSI 141 Performance 1 (classical – audition required) note this is a double-weighted full-year paper

Note: Auditions are required for papers that involve singing and/or playing an instrument.

### 200-level and beyond

At 200-level students are required to take specific theatre and music papers, and are also offered a choice from a range of other music, theatre and dance papers.

300-level includes a performance project paper.

The degree is flexible enough to accommodate up to four papers from outside the Arts area, in any subject of the student's choice.

Please note the BPA is undergoing refinement in 2017/18 and the current list of compulsory papers is likely to change from what is seen here.

# Pharmacology and Toxicology

Pharmacology is the study of drugs and medicines. Pharmacologists study how drugs work, and why they are used. Importantly, their ideas and knowledge are critical for the development of new drugs. Researchers at Otago are developing new cancer therapies, cardiac medicines and neurological treatments. As a student you will be introduced to a wide variety of core pharmacological topics including drug action, drug delivery, drug metabolism and the processes of drug development.

Toxicology is the study of poisons. This can apply to humans, animals, or the environment. Toxicologists aim to determine why things are toxic and how to prevent toxicity. Toxicology principles can also be applied to developing new medicines by developing compounds that are specifically toxic e.g. something that kills a cancer cell exclusively. Our toxicology courses cover all aspects

of toxicology (human, animal, and environmental). You can also elect to take a minor in environmental toxicology.

### Career opportunities

Graduates in Pharmacology and Toxicology are employed in a variety of careers including management, drugdiscovery, publishing, biotechnology and regulatory affairs. Our graduates have pursued careers within government agencies (e.g. Medsafe, Health Research Council, PHARMAC), private companies (e.g. Seperex Nutritionals, Nycomed, ADI instruments), universities (e.g. Harvard University, University of Oxford) and research organisations (Ludwig Cancer Institute, Children's Cancer Institute).

### 100-level papers

If you intend to major in Pharmacology (BSc or BASc) you must take the following 100-level papers:

CHEM 191 The Chemical Basis of Biology and Human Health

BIOC 192 Foundations of Biochemistry and at least two of:

CELS 191 Cell and Molecular Biology HUBS 191 Human Body Systems 1 HUBS 192 Human Body Systems 2

### 200-level and beyond

200-level papers (PHAL 211 and PHAL 212) introduce core concepts including how chemicals act as drugs, how new drugs are developed and how to manage harm. Students study the science behind the use of medicines including dosing, mechanisms of action and contraindications. Courses also cover essential topics in environmental and clinical toxicology.

300-level papers (PHAL 303, PHAL 304, PHAL 305, PHAL 306 and PHAL 307) encourage students to develop in-depth understanding of toxicology, neuropharmacology, clinical pharmacology and molecular pharmacology. Students apply this knowledge to clinical and research situations.

### **Pharmacy**

Do you want your job to have meaning? Are you passionate about changing people's lives for the better? Train to be a pharmacist with the School of Pharmacy at the University of Otago, and embark on a hands-on, cross-disciplinary, patient-focused learning experience that leads straight to a rewarding career in the health sciences.

Pharmacists are among society's most trusted and accessible health care professionals, and they are often the first point of contact for individuals with health concerns. Pharmacists are medicines experts who use their knowledge to help people manage their medicines and their health. The career is stimulating and rewarding – and it's also rapidly changing. With more drugs than ever before, people living longer and with more complex conditions, and governments broadening the scope of pharmacy delivery, the field is ever-evolving. Our undergraduate programme prepares you to tackle these changes head on with practical, teambased and patient-centred learning.

#### Career opportunities

You will have many opportunities as a pharmacist. You can work in, and/or own a community pharmacy and enjoy close relationships with the local community by providing advice about medical conditions and medicines. Alternatively, you could work in a clinic and provide advice to patients and healthcare professionals about medicines.

As a hospital pharmacist you are able to specialise in many areas, for example: diabetes, paediatrics, intensive care, respirology, cardiology, mental health, oncology and more. Hospital pharmacists participate in hospital ward rounds with the medical team, advise nursing staff and provide information to patients about their medicines.



### Pharmacy

"Once, when I was younger, I asked my Nan what one of her meds was for and all she knew was that it was 'for her heart'. This made me curious about medications; what do they do and why do we take them?

By studying pharmacy, I want to help my iwi, hapū and whānau, and improve health outcomes for all."

#### Hemi McKechnie

Ngāpuhi, Te Ati Haunui-a-Pāpārangi Studying towards a Bachelor of Pharmacy Pharmacists also fulfill important roles in places such as the Ministry of Health, Medsafe, universities, drug companies, pharmacy regulatory bodies, Pharmac and the armed forces.

Finally, pharmacists can continue their education and complete graduate studies in a variety of disciplines including pharmaceutical sciences, social pharmacy and clinical pharmacy and embrace additional careers in academia or industry.

### Admission to Pharmacy

You will generally enter the Pharmacy Programme following the Health Sciences First Year (HSFY) course. For details of the HSFY course for Pharmacy, see page 97.

There are 120 places available for New Zealanders and permanent residents in the second year of our programme, as well as an additional 30 places for international students. Your application for admission must be made to the Division of Health Sciences by 15 September of the preceding year. There are several different categories of admission, although most students will be selected on their performance in HSFY. Entry is competitive, and an average grade of B- or better is required for eligibility and typically a B average is required to gain a place (passing all HSFY papers). This grade standard is only a guideline and not a guarantee. If you select Pharmacy only as your choice, you will be given preferential consideration. The School of Pharmacy is committed to supporting Māori and indigenous Pacific Islands students for entry into Pharmacy.

You may also enter the programme after two or more years of university study or as a university graduate. In these categories, you will need to have successfully completed papers equivalent to the Otago HSFY prior to applying for entry into Pharmacy.

If your background does not fit the categories specified above, you can still apply for admission under the Alternative category. In every case, applicants have to

demonstrate that they have completed work equivalent to the requirements of the Otago HSFY course and meet the minimum academic standard.

### Studying Pharmacy

You will commence your Pharmacy degree in the second year of university study. Here you will build on the fundamental sciences studied during the HSFY. You will also learn about the practice of pharmacy along with the legal and social aspects of healthcare which are continued throughout the course. You will then study a series of integrated module-based papers where the focus is person-centred care in clinical settings and working with patients in the community. The integrated studies teach students how to apply what they learn at University to the practice of pharmacy. During these studies you will have opportunities to learn in different types of pharmacy environments alongside practising pharmacists.

#### Internship

Once you complete your fourth year and graduate, there is a one-year pre-registration (intern) programme run by the Pharmacy Council of New Zealand. This is undertaken as paid employment at an approved site in a hospital or community pharmacy. It is your responsibility to arrange employment at this site.

### **Philosophy**

Philosophy examines big questions about the nature of the world and our place in it, assessing the foundations of our beliefs and the principles we live by. Students learn rigorous and analytical approaches to answering complex and difficult questions. Studying Philosophy develops collaborative, creative and critical reasoning.

The University of Otago's Philosophy Department has received exceptionally high scores in all the PBRF quality evaluations by the Tertiary Education Commission since they began in 2003.

### Career opportunities

Employers value the clear thinking and reasoned argument learned in Philosophy. Philosophy graduates earn well and secure positions in business, government, secondary and tertiary education.

For more information see otago.ac.nz/philosophy/undergrad/careers.html

### 100-level papers

As the basic questions connect with most university subjects, Philosophy 100-level papers are a useful part of any degree. If you intend to major in Philosophy (BA or BASc), you must take two of the following 100-level papers:

### PHIL 101 Mind and Reality

Deals with questions of existence. Do we have souls as well as bodies? Does God exist? What is thought? Are we ever really free to choose our actions?

### PHIL 102 Knowledge and Truth

Discusses whether there is a convincing answer to the sceptic who says that nothing can be known for certain.

#### PHIL 103 Ethical Issues

Questions the basis of our distinctions between right and wrong, good and bad.

#### PHIL 105 Critical Thinking

Teaches clear thinking and logical argument.

Note: Students with a Mathematics background should take PHIL 222 Introduction to Formal Logic instead of PHIL 105.

### 200-level and beyond

These papers examine the foundations of many areas of human thought, including the social, biological and physical sciences, religion, ethics, politics, language, mind and logic.

# Philosophy, Politics and Economics

Philosophy, Politics and Economics (PHPE or PPE) combines three long-established and influential disciplines with natural affinities and common roots. For example, Economics developed from the field of Political Economy, Welfare Economics utilises concepts of social justice from Philosophy, and the Philosophy of Science has important implications for methodologies adopted in Economics and Politics. The aim of the programme is to give a broader exposure to the range of analytical approaches in these three disciplines than would be gained within any one of the traditional single-discipline majors taken separately.

#### Career opportunities

The PHPE major cultivates a set of logical, analytical and mathematical skills that are in demand among employers. It also exposes students to three different approaches to understanding (and perhaps improving) the social system. Career opportunities exist in a broad range of businesses, government departments and NGOs, both in New Zealand and in the wider world. Graduates of the programme include senior advisers in several ministries, diplomats, business consultants, journalists, lawyers, think-tank members and CEOs.

Bachelor of Arts (BA) or Bachelor of Arts and Science (BASc) in Philosophy, Politics and Economics

#### 100-level

BSNS 113 Economic Principles and Policy ECON 112 Principles of Economics 2

One 100-level PHIL paper (PHIL 103 Ethical Issues is recommended)

One 100-level POLS paper (POLS 102 New Zealand Politics is recommended; POLS 101 Political Philosophy, is also popular).

HIST 108 is recommended as an optional non-PHPE paper, providing useful historical background, for example, to POLS 101, PHIL 227 and PHPE 201

### 200-level

PHPE 201 Political Economy 1: Method,

Philosophy, Applications

ECON 201 Microeconomics

or

ECON 271 Intermediate Microeconomic

Theory

One 200-level PHIL paper

One 200-level POLS paper

Two further ECON, POLS or PHIL papers (not in the same subject)

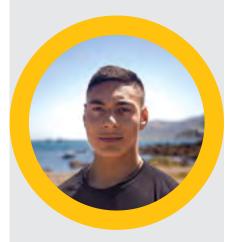
#### 300-level

Six 300-level ECON, PHIL, PHPE or POLS papers, including at least one paper in each of Economics, Philosophy, and Politics. PHPE 301 is strongly recommended when it is available.

For intending PHPE students thinking of specialising in Economics, it is useful to have done one of the following papers: FINC 102, MATH 160 or MATH 170.

Bachelor of Arts with Honours (BA(Hons)) in Philosophy, Politics and Economics

One of ECON 490 Econometric Methods and Dissertation, ECON 492 Dissertation, PHIL 490 Dissertation, or POLS 490 Dissertation; plus three further 400-level ECON, PHIL or POLS papers. No more than 100 points may be from any one of the component disciplines. This means, in effect, that even if you choose to specialise you must do at least one paper which is not from your preferred subject.



### Physical Education

"I chose to study Physical Education because of my passion for physical activity, and my belief that being active can enhance all aspects of health. The range of papers available within the Phys Ed degree – from health sciences to social sciences - was a very attractive feature of the programme and, as I progressed through my studies, I found my 'calling': using the skills I have gained to encourage members of the community to lead healthier, more active lives."

### Troy Ruhe

Ngāpuhi, Ngāti Tūwharetoa Studying towards a Master of Physical Education

### Physical Activity and Health

See Physical Education for details on admission into this major.

Physical Activity and Health is a multidisciplinary major underpinned by a biosocial conceptualisation of health which combines theoretical knowledge with applied experience. The major draws from diverse fields and links together physiological, behavioural and developmental perspectives. It analyses prescriptive models and practices surrounding physical activity, including interventions aimed at disease prevention and/or the advancement of wellbeing.

A review of these programmes is currently being undertaken and they are expected to change. Please see the School's website for the most up-to-date information: physed.otago.ac.nz/

### Career opportunities

The field of physical activity and health is a growing area of employment for Physical Education, Sports and Exercise Sciences graduates. The Physical Activity and Health major supports students who are interested in a number of health-related careers ranging from community health co-ordinators to clinical exercise specialists working in rehabilitation of individuals with chronic medical conditions. This major provides the foundation for further postgraduate studies in the area of clinical exercise physiology.

# Physical Education, Sports and Exercise Sciences

Otago's Bachelor of Physical Education (BPhEd) is a world-leading programme that provides you with an opportunity to develop the skills and lifelong learning strategies underpinning all aspects of life and work in the sport, fitness, leisure and physical education fields. The BPhEd is a four-year degree and you can complete it in conjunction with another degree such as Applied Science, Arts, Commerce, Law and Science, with only one year of extra study.

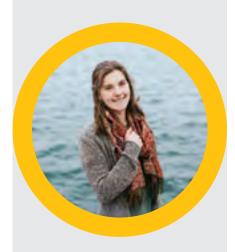
The School of Physical Education, Sport and Exercise Sciences offers four majors:

- Exercise and Sports Science (see page 89 for more details)
- Physical Activity and Health (see above for more details)
- Professional Studies (see page 128 for more details)
- Sport and Leisure Studies (see page 134 for more details).

A review of these programmes is currently being undertaken and they are expected to change. Please see the School's website for the most up-to-date information: physed.otago.ac.nz/

### Career opportunities

Graduates of the BPhEd have enhanced technical, critical and problem-solving skills. These skills have enabled recent graduates to gain employment in: national and regional sports organisations and trusts; outdoor industries; city councils; primary and secondary schools; fitness industries; Māori organisations; sports-related businesses; sport media; tertiary institutions; government departments (e.g. ACC, armed forces, police force and High Performance Sport New Zealand); community organisations (e.g. Age Concern, Green Prescription); dance schools;



### Physics and Oceanography

"I really enjoyed studying physics at school – I loved the combination of maths and problem-solving – and wanted to pursue a subject that I enjoyed and was good at, but that would still challenge me. The ocean has always fascinated me as one last frontier to be explored and preserved, so, after finding out that Otago offered Oceanography, I added this to my programme and began my double major."

### Monica Nelson

Studying towards a Bachelor of Science (Physics and Oceanography)

and the tertiary sector. See the graduate career diagram for inspiration — physed.otago.ac.nz/prospective/careers.html

### Admission process

The BPhEd is a four-year restricted entry degree. To enter the programme you must apply by 15 August the year before you plan to study at Otago. Under special circumstances late applications will be considered. Offers of places will initially be made in mid-October and may continue to be made as late as mid-February. Successful applicants will be required to satisfy University Entrance requirements and enrolment procedures.

There are two main entry pathways into the BPhEd: i) as a school-leaver or ii) as someone who has had one or more years at university. If you do not fit these two pathways, because you have, for example, been in the workforce and/or travelled, we encourage you to contact the School to discuss your personal situation. (See physed.otago.ac.nz/courses/apply.html for information about applying for entry into the BPhEd.)

For school-leavers, no specific Year 12 or 13 subjects are required for admission. However, Biology and Physical Education are highly recommended.

### 100- and 200-level papers

If you gain admission into the BPhEd you must take the following papers in your first two years:

Sociocultural Foundations of

### 100-level PHSF 101

		Physical Education
Pł	HSE 102	Biophysical Foundations of Human Movement
Pł	HSE 103	Movement Education: Dance and Gymnastics
Ρŀ	HSE 191	Human Body Systems 1
Ρŀ	HSE 192	Human Body Systems 2
and a further 36 points from any degree.		

#### 200-level

ANAT 250	Functional Anatomy
PHSE 104	Applied Physical Experiences
PHSE 202	Movement Analysis and Control
PHSE 203	Exercise Physiology
PHSE 204	History of Sport
PHSE 205	Psychology of Sport
PHSE 206	Sociology of Sport

### 300- and 400-level

In your third and fourth years of study you begin to specialise in an area of your choice, i.e. you choose your "major". The major will build on some of the core ideas you were introduced to in your first and second years. You can major in one or two of the following areas: Exercise and Sports Science (see page 89); Physical Activity and Health (see page 123); Professional Studies (see page 128); Sport and Leisure Studies (see page 134).

In your third and fourth years there is scope for you to choose papers from outside the BPhEd, enabling you to develop an understanding in complementary areas.

### **Physics**

Physics addresses the fundamental questions about how the universe works and it provides the concepts and experimental methods to seek the answers. It is also a very practical subject with application in every sphere of human activity, from medicine to developing sustainable forms of energy production, and it has been central to the development of much of modern technology. The papers in our degree courses cover topics as diverse as the quantum theory of light and matter, Einstein's theory of relativity, optics, digital electronics and global warming.

### Career opportunities

Physics training develops highly transferable skills in problem-solving and critical thinking, as well as technical capabilities that are greatly valued by employers. Our graduates are found all over the world, and have used their Physics degree as a platform for a wide range of rewarding careers in fields such as control systems engineering, scientific research, renewable energy, software development, teaching, medical technology and finance.

### JumpStart Physics

The department offers an introductory course called JumpStart Physics during Summer School. The purpose of this course is to provide students with the background knowledge and study skills necessary to confidently undertake the PHSI 191 Biological Physics course at the University of Otago. Students who have achieved 14 credits and higher in NCEA Level 2 Physics or General Science will not be accepted. There are limited places available.

### 100-level papers

If you intend to major in Physics (BSc or BASc), you should take the following 100-level papers:

MATH 160 Mathematics 1
MATH 170 Mathematics 2
PHSI 131 Fundamentals of Physics I
PHSI 132 Fundamentals of Physics II

Note: It is possible to proceed to 200-level Physics with any one of PHSI 191, 131, 132. Most 200-level Physics papers require MATH 160 or 170.

PHSI 131 Fundamentals of Physics I

The development of physical law from Newton to the revolutionary ideas of quantum physics formulated by Planck, Schrödinger, Heisenberg, Bohr and Einstein. The physics of the real world: motion, energy and its transfer; and an introduction to the quantum mechanical nature of light and matter. Applications of the principles of physics to a technological society.

Recommended for majors in Mathematics, Physical Sciences, Computer Science or Engineering.

Note: It is recommended that students enrolling for PHSI 131 have a background in NCEA Level 3 Physics and Mathematics (or equivalent). Students with excellent results in NCEA Level 3 Physics (or equivalent) are advised to contact the departmental course adviser about substituting PHSI 243 or ELEC 253 for PHSI 131.

PHSI 132 Fundamentals of Physics II

The physics of modern technology. Foundations of electromagnetism and electronic circuits, applications of geometrical and wave optics, properties of materials, and thermal physics.

Recommended for majors in Physical Sciences, Mathematics, Computer Science or Engineering.

Note: It is recommended that students enrolling for PHSI 132 have a background in NCEA Level 3 Physics and Mathematics (or equivalent).

PHSI 191 Biological Physics (required for Health Sciences First Year)

Introduces the foundational Physics necessary for an understanding of biological systems: mechanics and movement, thermodynamics, properties of biological materials, electricity, light and vision, radiation and health.

### 200-level and beyond

In second year there are two core papers that develop core ideas of quantum physics, thermal physics, electromagnetism and optics, and a lab course introducing the skills and techniques of experimental physics. In addition there are options to take papers in environmental physics and electronics.

Your third year will continue to develop core ideas of Physics including topics such as atomic physics, relativity and cosmology, electromagnetic waves, statistical physics, particle physics and condensed matter physics. Two laboratory-based papers on experimental physics and computational physics are available, so you will have plenty of opportunity to gain hands-on experience in problem-solving. There is also scope for you to choose papers outside of Physics, enabling you to develop extra skills in a complementary area, such as Computer Science or Mathematics.



### Physiology

"Physiology was my first and only choice. It's an evergrowing subject that offers so many potential career opportunities. I am currently in my final year of training to become a qualified anaesthetic technician at the Canterbury District Health Board. Did my studies at Otago prepare me for this? Most definitely. Physiology has given me a great foundation for a career that I love."

### Melanie Leighton

Bachelor of Science (Physiology)

Trainee Anaesthetic Technician, Canterbury District Health Board

### **Physiology**

Physiology explores how our bodies work, and allows you to understand how your body functions in health and disease, or in adverse environments. Physiology is focused on the biology within cells and organs, the interactions between cells and organs, and the effects that these interactions have on your behaviour and health.

### 100-level papers

If you intend to major in Physiology (BSc or BASc), you must take the following 100-level papers:

HUBS 191 and HUBS 192

Human Body Systems 1 and 2

and at least two of:

BIOC 192 Foundations of Biochemistry
CELS 191 Cell and Molecular Biology

CHEM 191 The Chemical Basis of Biology

and Human Health

PHSI 191 Biological Physics

### 200-level and beyond

In second year you take three 200-level Physiology papers. You will discover how the nervous system senses the environment, decides if changes need to be made and co-ordinates the body's responses (PHSL 231). Experiments on yourself will help you understand the function and integration of the cardiovascular (heart and blood vessels) and respiratory (lung) systems (PHSL 232). Getting food into your body and waste out, through the gastrointestinal (gut) and renal (kidney) systems, is the focus of our third paper (PHSL 233). You will build on your understanding of the healthy function of your body systems by comparison to disease states.

At third year you choose at least four papers from PHSL 341-345. These build upon the 200-level papers and explore: cellular, molecular and integrative neurophysiology; cellular and epithelial physiology; cardiovascular physiology; and physiological aspects of health and disease.

If you fall in love with Physiology, consider a research degree at 400-level (honours or PGDipSci), followed by master's and PhD-level research. These degrees include carrying out your own totally novel research project under the guidance of a supervisor.

### Career opportunities

Studying Physiology gives you the opportunity to develop the skills and lifelong learning strategies crucial for careers in science – such as in universities, polytechnics, hospitals, government and agricultural research agencies – or even in military or space agencies. Physiologists are also well placed to pursue additional training for biomedical-based careers such as in medicine, dentistry, pharmacy, optometry, audiology, or physiotherapy.

### Physiotherapy

For details of the Health Sciences First Year (HSFY) for Physiotherapy, see page 97.

A physiotherapist works with people of all ages to maintain and promote health, and to restore physical function, independence and well-being, always working in partnership with their patients and clients.

The main methods of managing patients include specific exercise prescription for mobility, strength, balance and health-related fitness; manual techniques, such as manipulation and massage; and application of other modalities including heat and electrotherapy as well as education of the condition and the best way the patient can assist in their own physical recovery.

The University of Otago's School of Physiotherapy has an excellent teaching environment. It is a purpose-built facility that includes spacious laboratories and state-of-the-art equipment of an international standard. Highly-skilled physiotherapists also work in the School's own clinics which are open to the public. The Physiotherapy programme is also able to draw on the strengths and expertise of staff at the Faculty of Medicine and other departments in Health Sciences and Science. The School is well known for its clinical teaching programmes delivered in in Dunedin, Wellington and Christchurch, and in its teaching hubs.

### Career opportunities

Graduates are eligible to register with the Physiotherapy Board of New Zealand as soon as they are awarded their degree and must register in order to practise. The qualification is internationally recognised. Work environments include practice in acute hospitals, rehabilitation centres, private practice, occupational health, in schools with children with special needs, sports clinics, industry, with the elderly and in research.

### Admission

Entry to second-year classes is competitive and based on admission levels set by the School of Physiotherapy Admissions Committee.

Admission to the second-year classes of the four-year Bachelor of Physiotherapy (BPhty) requires students to pass all HSFY compulsory papers with a minimum B- (65%) average to be considered for admission. There is a "two year plus" category for applicants who have completed two or more years of university study towards a degree, and have completed three or more papers at the 200-level and passed the HSFY papers or their equivalents. Applicants must have a minimum of a B- across all papers.

Applications are considered from graduates who have completed a first degree, first degree followed by honours or first degree followed by a postgraduate diploma similar to an honours programme from a university in New Zealand normally within the minimum time and within the past three years.

Applications are also considered from people who do not satisfy the normal requirements, but who may warrant admission for particular reasons, such as those with a relevant health-related employment background who can show evidence of academic ability to an appropriate level. Successful applicants in this category will be required to complete the HSFY or equivalent, before a place in the second-year class can be confirmed.

### Single Programme Preference (SPP)

In considering applications from domestic students, the School of Physiotherapy Admissions Committee will first select from those applicants who have specified that they are applying for Physiotherapy only, and not also to another professional programme. It is important that students seek advice on what is the best application option for their career goals before applying. The SPP does not apply to the Alternative category.

Note: There is a subcategory for Māori and New Zealand resident Pacific Island applicants in each of the four categories.

The four-year Physiotherapy programme is physically demanding and prospective applicants need to be aware of this when considering their ability to apply for entry to the programme and later when seeking registration with the Physiotherapy Board of New Zealand. If you have any doubts about your health or ability to cope with the course, you should contact either the Associate Dean for Undergraduate Studies (Physiotherapy) or the University Disabilities Officer for advice. Questions are dealt with in confidence.

### 200-level and beyond

Subjects studied in the three years following HSFY include: Functional Anatomy, Physiology, Pharmacology, Pathology, Physiotherapy Rehabilitation Science, Physiotherapy Clinical Practice and Research.

Supervised clinical experience of around 1,000 hours must be completed during the course. In your fourth year, you'll be assigned to one of the School's clinical centres in Dunedin, Christchurch, or Wellington, and clinical sites associated with the centres.

Top performing students in Year 3 may be invited to undertake an honours programme in Year 4. The final year involves supervised clinical practice and an individual research project. Students graduate with BPhty(Hons) and, like the BPhty graduates, are then eligible for registration.

### **Planning**

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See Botany, Ecology, Geography, Geology, Marine Science and Zoology.

The Master of Planning (MPlan) degree is a postgraduate interdisciplinary programme requiring two years of study. Planning professionals play a major role in the decision-making processes of government, local government and private enterprise. Planners help communities and decision-makers plan for the future, creating ways forward in relation to land use, resource use, transportation, housing, economic development, the environment, heritage, sustainability, hazard mitigation and the design of more livable, safe spaces.

To enter the MPlan, students will need a degree in a relevant field such as Geography, Geology, Politics, Economics, Indigenous Studies, Botany, Ecology, Zoology, Law, Sociology, Science or Surveying. The degree is accredited by the New Zealand Planning Institute as providing a recognised training course for professional planners.

#### Career opportunities

Planning is a practical, relevant and growing profession and provides students with excellent career prospects. Graduates find work with both central and local government and in both the public and private sector. Recent graduates have been employed with organisations such

as planning consultancies, regional and district councils, the Ministry for the Environment, the Parliamentary Commissioner for the Environment, the Department of Conservation, Heritage New Zealand, New Zealand Transport Agency and the Christchurch Earthquake Recovery Authority.

### **Plant Biotechnology**

Plant Biotechnology encompasses plant physiology, plant biochemistry and plant molecular biology. Plant scientists in Botany and Biochemistry teach the structure and function of the whole plant and how to apply modern molecular and biochemical techniques to manipulate plants of agronomic importance.

### Career opportunities

There are opportunities in at least three of the Crown Research Institutes (dealing with horticultural, arable, pastoral and forestry products), private sector companies, university research groups, and in secondary and tertiary teaching.

If you are interested in a career in molecular biotechnology, contact the programme director, Professor Julian Eaton-Rye (julian.eaton-rye@otago.ac.nz)

### 100-level papers

There are no 100-level papers in Plant Biotechnology. If you intend to major in Plant Biotechnology (BSc), you must take the following 100-level papers:

BIOL 123 Plants: How They Shape the World

and at least one of the following

BIOC 192 Foundations of Biochemistry
CELS 191 Cell and Molecular Biology
CHEM 191 The Chemical Basis of Biology

and Human Health

ECOL 111 Ecology and Conservation of Diversity

### 200-level and beyond

200-level papers include BTNY 221 Plant Physiology and Biotechnology and at least three 200-level BIOC, BTNY or GENE papers.

300-level papers include PLBI 301 Applied Plant Science and PLBI 302 Plants for the Future; and Biochemistry, Botany or Genetics 300-level papers.

In addition to BSc and BSc(Hons), it is possible to study for postgraduate qualifications in Plant Biotechnology.

### **Politics**

Whether you know it or not, politics exists everywhere. Politics is about power: who has it, why they have it, and how and where they use it. This often starts by looking at why governments hold power, how they use it, and who is affected by it. Politics is not just about the National party versus the Labour party. Politics covers international relations and diplomacy, political theory, New Zealand politics, and the politics of regions and countries such the Middle East, Asia, Pacific, Europe and the United States.

A politics student studies how power works, and more importantly seeks to find solutions for how power should be managed. He/she asks questions such as, which is the most powerful country and/or organisation in the world, why are they powerful, and how and where do they use this power? More importantly, can we limit this power, and how? By understanding questions such as these, a politics student is empowered to make a difference.

### Career opportunities

Studying Politics doesn't mean you will become a politician (although you could!). Studying Politics will give you analytical and communication skills that are widely sought after and attractive to employers in various fields. Our graduates find highly rewarding careers in a broad range of areas

such as the diplomatic core, NGOs and the not-for-profit sector, government ministries, consultancy firms, the private sector, education and the media.

### 100-level papers

If you major in Politics in either the BA or BASc degrees, you'll need to take two of the following papers:

POLS 101 Political Philosophy: Basic Problems

Ask the big questions! What constitutes the good life? Is politics natural? Should individual liberty outrank other goods?

POLS 102 New Zealand Politics: Introduction

Explore and understand the New Zealand political system.

POLS 104 International Relations: Introduction

Consider key elements of modern international relations.

POLS 105 Comparative Politics: Introduction

Compare the political institutions and processes of different countries.

### 200-level and beyond

Study topics such as democracy, ethnic conflict and peacekeeping, theories of justice, ethics and international affairs, political theory, environmental politics, politics and the media, US foreign policy, and the Middle East.

Politics is an excellent subject to combine with other subjects. Popular study combinations are Law, Psychology, Geography, Economics, Communication Studies, History and Management.

### **Professional Studies**

See Physical Education for details on admission into this major.

The Professional Studies major emphasises professional practice in the fields of teaching physical and health education, outdoor education, and dance as well as in exercise prescribing, coaching and sports training. Subject areas include: Outdoor Education; Māori Physical Education; Athletic Training and Conditioning; Dance Education; Dance in the Community; Sports Coaching; Teaching Physical Education and Health.

A review of these programmes is currently being undertaken and they are expected to change. Please see the School's website for the most up-to-date information: physed.otago.ac.nz/

### Career opportunities

The Professional Studies major enhances students' technical, critical and problemsolving skills. These skills have enabled recent graduates to gain employment in: national and regional sports organisations and trusts; outdoor industries; city councils; primary and secondary schools; fitness industries; Māori organisations; government departments (e.g. ACC, armed forces and police force); community organisations (e.g. Age Concern, Green Prescription); dance schools; and the tertiary sector. See the graduate career diagram for inspiration – physed.otago. ac.nz/prospective/careers.html

### **Psychology**

Psychology is the science of behaviour and how behaviour is represented in the brain. Academic staff in the Department of Psychology study the way humans and other animals interact with the world and each other. They examine how our abilities change with age, what might underlie abnormal behaviour, and how we process and store information using our senses and memory. They study how our experiences shape our behaviour, and why things such as drugs, hormone levels and lack of sleep can influence the way we behave. The research conducted in the Department of Psychology addresses problems in areas as diverse as sleep disorders, industrial relations, phobias, drug rehabilitation,

aircraft safety, hyperactivity in children, how nonhuman animals think, as well as how the brain works.

Psychology is a very popular course. It may be a major in either Arts or Sciences and can be taken in conjunction with a number of degrees such as Commerce, English, Law, Physical Education and Applied Science, to name but a few. The Department of Psychology at Otago has a highly regarded teaching programme and is internationally renowned for the strength of its research.

### Career opportunities

Graduates from the Department of Psychology have gone on to secure jobs in universities, health services, business and industry, road safety, communications and planning, and various government agencies. Clinical Psychology graduates have gone on to work in the public health sector or in private practice.

Graduates with appropriate postgraduate qualifications work in research sections of the government, such as the Departments of Health, Justice, Social Development, Transport and the Ministry of Business, Innovation and Employment. Many of our graduates spend time working overseas, particularly in the United States, United Kingdom or Australia.

### 100-level papers

If you intend to major in Psychology (BA, BSc or BASc), you must take the following 100-level papers:

PSYC 111 Brain and Behaviour

(introduces the biological bases of behaviour, memory, neuropsychology, perception, learning and developmental psychobiology.)

PSYC 112

Human Thought and Behaviour (introduces child development, social psychology, thought and language, and abnormal psychology.)

Students intending to major in Psychology are recommended to take STAT 110 or STAT 115.

200-level papers cover topics such as biopsychology, sensation and perception, cognitive processes, applied psychology, social cognition, intergroup and interpersonal processes, abnormal psychology, and theoretical and applied approaches to explaining individual differences in behaviour, intelligence and personal adjustment.

300-level papers cover topics such as human development, social processes, brain-behaviour relationships, cognition, perception, and forensic and applied psychology.

### **Public Health**

Public Health can be defined as the art and science of preventing disease, prolonging life and promoting health through the organised efforts of society. Public Health papers provide the opportunity for a minor in Public Health, and combine usefully with a range of majors.

The study of health and disease in human populations, known as Epidemiology, is the core of the minor in Public Health.

Other papers that contribute to the minor cover health promotion, health policy and politics, and Public Health research.

To fulfil the requirements for a minor you need to complete the five following papers:

PUBH 192	Foundations of Epidemiology
PUBH 202	Health Promotion
PUBH 203	Health Policy and Politics
PUBH 211	Epidemiology of Major Health Problems
PUBH 311	Research Methods for Public

Health



### **Radiation Therapy**

### Wellington Campus

Are you attracted to a scientific discipline, willing to accept responsibility and keen to work as part of a team of skilled professionals treating and curing patients?

The three-year Bachelor of Radiation Therapy (BRT) qualifies you as a radiation therapist able to use radiation to treat disease with minimum supervision from radiation oncologists. The qualification incorporates theory components at the University of Otago, Wellington; and practical components at radiation oncology departments around New Zealand. In addition, students complete work experience in radiation oncology departments during many of the academic breaks. This work experience is a course requirement for the programme.

#### Career opportunities

Graduates may apply for registration with the Medical Radiation Technologists' Board (MRTB) and work in departments of radiation oncology in Auckland, Hamilton (Waikato), Tauranga, Palmerston North, Wellington, Christchurch and Dunedin. Overseas opportunities exist particularly in Australia, Canada and England.

### Entry requirements

- The Radiation Therapy Admissions
   Committee shall consider applications
   from candidates in the following
   categories:
  - Admission with secondary school qualification
- Admission with one year of university study
- Admission with two or more years of university study

- · Admission as a graduate
- Admission with alternative qualifications and/or experience
- 2. Demonstration of suitability to the profession by interview:
  - Selection for interview is based on academic performance, to a standard determined by the Radiation Therapy Admissions Committee
  - In preparation for the interview, it is strongly recommended that all applicants visit a radiation oncology department.

Student numbers will be limited due to the availability of clinical placements.

Refer to Radiation Therapy Admission Guidelines at otago.ac.nz/healthsciences

### Māori and New Zealand Resident Indigenous Pacific Origins (NZRIPO) applicants

The Division of Health Sciences is actively seeking to recruit Māori and/or Pacific origin students for Radiation Therapy. Therefore, students who are of Māori and/or Pacific origin may have this fact taken into consideration along with their application by completing Form A (Māori) or Form B (NZRIPO).

Upon acceptance into the programme applicants will usually be offered a clinical placement from one of the hospitals taking part in the programme to ensure access to clinical training. A current approved comprehensive first aid certificate is required on entry to the programme. Applications for admission must be made to the Health Sciences Admissions Office by 15 September of the preceding year.

#### 100-level papers

The Bachelor of Radiation Therapy (BRT) is a professional course and all papers are compulsory. Subject areas include:

Radiation Therapy Practice, Anatomy and Imaging, Health and Human

Behaviour, Healthcare Communication, Radiation Technology, Radiation Therapy and Oncology, and Radiation Therapy Planning Concepts.

200- and 300-level papers cover Radiation Therapy Practice, Radiation Technology, Radiation Therapy and Oncology, Radiation Therapy Planning Concepts, Advanced Healthcare Communication, Principles of Research, Literature Analysis, and Professional Development.

### Religion

The academic study of religion has never been more important. From debates over marriage, to civil wars, to popular culture, religion features daily in the headlines of the globe's newspapers. Today's world needs people who can think clearly and creatively about religion's shifting role in political, economic and social life. Our papers use methods from history, philosophy, anthropology, sociology and politics to study religion as a human phenomenon. Our questions are comparative and critical: How do religious myths justify social order? What bodily techniques do religions use? How is religion related to magic, and to science? Are religious people more altruistic than nonreligious people? How would we find out? Why do religions give women such a hard time? Why do women outnumber men in so many religious communities?

#### Career opportunities

Students who study religion apply their knowledge in a variety of employment settings: from government, to education, to journalism, to business, to non-profit, to law.

### 100-level papers

If you wish to major in Religious Studies, you must complete:

RELS 101 Introduction to Judaism, Christianity and Islam

RELS 102 Introduction to Hinduism and

Buddhism

### 200-level and beyond

Advanced papers deal with individual religious traditions in greater depth, as well as dealing with themes across a number of religions. Religion is studied as it exists in relation to other spheres of human activity, rather than as an isolated phenomenon. Most Religion papers are offered through the University's Distance Learning network.

#### Minor in Buddhist Studies

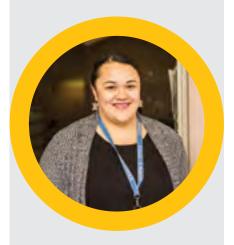
There is much to be gained by studying the major religions of the world alongside one another, and many of our papers deal with more than one religion. However, the Religion programme has particular strength in the study of Buddhism and it is also possible to specialise in studying Buddhism and gain formal recognition of this by including a Buddhist Studies minor in your degree. Five papers are required for a minor; for Buddhist Studies these should begin with RELS 102. In addition you must take at least three papers above 100-level, including one above 200-level, from the lists provided in the *Guide to Enrolment*.



### **Science Communication**

The Master of Science Communication (MSciComm) comes in three different streams: science and natural history filmmaking, creative non-fiction writing, and science in society. The programme is open to all graduates.

Admission to the programme is on a competitive basis and applicants should have a minimum B average in 300-level papers.



### Social Work

"I wanted to be a change maker; helping people find the right path to a better future. My studies opened my eyes to how harsh our world can be, and how social workers are forever trying to make it better. Otago prepared me well for a challenging and rewarding career, and has opened doors to many different pathways that I want to explore."

Tulua Sekone-Fraser
Bachelor of Social Work
Youth Advisor, Southern DHB – Community
Mental Health

### Career opportunities

The programme will support a variety of career options, including natural history filmmaking, documentary making, the production of educational materials, science journalism and writing, publishing, museum and display work, public relations for organisations involved with wildlife and the environment (e.g. regional councils, Department of Conservation, conservation groups and tourist ventures) and online promotion of science through digital means.

### 100-level papers

BSc students majoring in science subjects are recommended to include in their degree one or more papers in subjects such as Media, Film and Communication Studies; English (science writing) or Philosophy (the philosophy and history of science).

Students not majoring in science subjects are recommended to include one or more science papers in their degrees.

sciencecommunication.info

### **Social Work**

Social workers are increasingly required to hold professional social work qualifications at degree level, and it is likely that in the future registration with the Social Workers' Registration Board will be mandatory. The University of Otago provides one of the leading programmes of social work education in New Zealand and as a programme accredited by the Social Workers' Registration Board it enables graduates to apply for registration. Our students are taught a combination of broad academic critical skills as well as applied social work practice skills. Fieldwork components at 300- and 400-level are an important part of this programme.

There are two pathways to completing the Bachelor of Social Work:

### Pathway 1

Students initially enrol through the eVision portal in the "pre-professional (BSW)" as the programme of study. Students undertake two years in the pre-professional BSW before applying for entry into the BSW programme for years 3 and 4. The first two years must include specific papers at 100-level from SOWK, SOCI, MAOR, and EDUC or PSYC programmes (as outlined below). Students apply for admission to the BSW at the end of their 200-level year and must have 234 points to be eligible for the professional programme (years 3 and 4). This path requires four years full-time study to complete the requirements for the BSW degree.

### Pathway 2

Alternatively, students can apply for entry into the BSW 300-level after completion of a BA, provided their course of study is relevant. Students may also apply on completion of a BTheol, BSc in Psychology or BEdSt or a related undergraduate degree. Students undertaking this pathway can cross credit a maximum of 180 points to their BSW from their undergraduate degree, but will also need to complete another three papers (54 points) to have a total of 234 points. In total, this pathway will take five years, and students will graduate with a double degree.

#### Career opportunities

### Government services

Department of Child, Youth and Family, Community Probation, Prison Service, Te Puni Kokiri and Ministry of Social Development.

### Health services

Hospitals, mental health, care of the elderly, medical/surgical, newborn intensive care and children's health.

#### Community services

Non-government social service organisations such as Age Concern, Barnardos, Salvation Army, Presbyterian Support, Methodist Mission and Kaupapa Māori services.

#### Other

Schools, local government and private sector services.

The following shows the structure of pathway 1, and an indication of relevant areas of study for pathway 2 students:

#### 100-level

### Compulsory papers:

MAOR 102	Introduction to Māori Society
MAOR 110	Introduction to Conversational Māori
SOCI 101	Sociology of New Zealand Society
SOWK 111	Working with People: The New Zealand Context
either	
EDUC 102	Human Development
or	
PSYC 112	Human Thought and Behaviour

#### 200-level

### Compulsory papers:

SOWK 201	Fields of Practice
SOWK 236	The Treaty and Social Services
SOCI 201	Sociological Research in Practice
SOCI 205	Social Inequality
SOCI 207	Families and Society
(In addition to these compulsory papers students also take up to 54 points of approved papers from Arts and Music Schedule C and PAST papers.)	

### Experience requirements

In addition to academic requirements, students applying for the BSW in either pathway must also have experience in the social service sector. Relevant experience is demonstrated by:

 Relevant work experience (paid and unpaid) in the social and community work services sector or related fields  Supporting documentation and references demonstrating that the work experience has been performed competently.

The more experience students have in practice the higher they will rate for suitability when applying to enter the BSW.

Students thinking about taking professional social work are strongly recommended to contact the Department of Sociology, Gender and Social Work to discuss their most appropriate course of study as undergraduates or to check that other qualifications might allow them direct entry into 300-level professional study.

### Sociology

Sociology critically analyses how people organise and participate in groups, collectivities or societies. It seeks to understand how humans as social beings construct, re-construct and resist the social world in which they live. Sociology is also very interested in social change - how societies or social groups change over time. Sociology is also strongly interested in social conflict. Why are some societies so conflict-ridden, and what kinds of social divisions lie behind such conflicts? Why is it that differences of ethnicity, religion and gender are the basis of major conflict in some societies and yet are the source of much less tension in other societies? Who decides what is "bad" conflict and what is "good" conflict?

The subject matter of Sociology traverses a broad range of topics, including: inequalities of class, gender and ethnicity; social dynamics of environmental sustainability and change; social institutions such as family, media, education, work, religion and government; and the implications of these for health and well-being.

### Career opportunities

Sociology is a broad-based discipline that combines well with a range of other subjects at university. By learning skills of social research and social analysis, Sociology graduates find careers in the following fields: social and marketing research, trade unions, human resources, public health, national and local government (conducting research and advising ministers on issues related to housing, health, service delivery, arts and culture, tourism and sport etc.), non-governmental organisations, academia and politics (working on social justice campaigns, advising politicians on social policy). Upper level Sociology papers include options to place students into applied research situations with community groups, organisations and businesses as a bridge towards deploying sociological skills in workplace situations.

The University of Otago offers both a minor and a major in Sociology. A major in Sociology is available within the BA degree, and a minor in Sociology can be attached to a BA, BASc, BPA, BCom, BSc, BAppSc or BTheol degree. As a degree programme, Sociology works well in conjunction with a minor in Public Health, Management, Marketing, Tourism, Social Services Law, Psychology and Gender Studies. Both the major and minor are administered through the Department of Sociology, Gender and Social Work.

### 100-level papers

The Sociology major requires you to take both of:

SOCI 101	Sociology of New Zealand Society
SOCI 102	Cultural and Social Identities
SOCI 101	Sociology of New Zealand Society

An introduction to core concepts in Sociology. Issues examined include gender, sexuality, class, race/ethnicity, social divisions and inequality. Case studies from Aotearoa/New Zealand society are used to illustrate these issues.

SOCI 102 Cultural and Social Identities

An introduction to studying social identity. The paper addresses processes involved in identity construction; core aspects of institutional life, including family, religion, education, politics and the economy; as well as drivers of social change, such as urbanisation, sustainability, globalisation and social movements.

### 200-level and beyond

At higher levels, there is a selection of 200- and 300-level SOCI papers available to complete a major or minor. Approved papers in other programmes may also be substituted into a SOCI major or minor.

### **Software Engineering**

Software Engineering can be studied for the Bachelor of Applied Science degree. There is a growing need for technical professionals who are able to manage the construction of advanced ICT (Information and Communication Technology) systems. Such systems include those that enable people to access a wide range of relevant information. To meet this need individuals need the skills to manage the design, development, application and maintenance of complex software systems, as well as having an understanding of the business and social context of these systems. Software Engineering emphasises those aspects of computer and information science that are concerned with the principles and techniques required to produce high performing, reliable software systems.

### Career opportunities

Study in this area provides the student with excellent national and international career employment opportunities.

### 100-level papers

If you intend to major in Software Engineering (BAppSc), you must take the following 100-level papers:

Papers worth at least 120 points including:

COMP 101 Foundations of Information Systems

COMP 160 General Programming and one of the following: MATH 151, 160, 170 or FINO 102

Note: The course must include either an approved minor or an approved second major subject. This supporting subject can be from Commerce, Humanities or Sciences.

otago.ac.nz/courses/subjects/seng.html

### Spanish

With over 400 million native speakers from 21 countries spread across all five continents, Spanish is truly a global language. To enhance the learning experience, the University of Otago has strong academic partnerships with universities in Spain and Latin America that offer exchange programmes for those seeking to immerse themselves in Spanish language and Hispanic culture during their study. While Spanish is available as a BA major, many students choose to study Spanish as a minor or through a Diploma in Language.

### Career opportunities

Spanish language and culture skills distinguish graduates from others seeking employment opportunities in government, planning and consultancy firms, mass media (e.g. journalism, publishing and advertising), finance and banking, healthcare, tourism and hospitality. With trade links between New Zealand and Latin America growing, the demand in business for Spanish language graduates is on the increase.

### 100-level papers

If you have no previous knowledge of Spanish and intend to major in Spanish (BA),\* you must take the following papers:

SPAN 131 Introductory Spanish 1
SPAN 132 Introductory Spanish 2
GLBL 101 Introduction to Intercultural Communication

SPAN 131 Introductory Spanish 1

An introductory course in reading, writing, listening to, and speaking Spanish for students with no previous knowledge of the language.

SPAN 132 Introductory Spanish 2

A continuation of SPAN 131, further developing skills in reading, writing, listening to, and speaking Spanish for students with some basic knowledge of the language.

GLBL 101 Introduction to Intercultural Communication

Understanding communication across cultures: communication styles, interpersonal relationships and intercultural competency.

\*Students who have previously studied Spanish should seek special permission to enrol in 200-level language acquisition papers.

### 200-level and beyond

Beyond first-year papers, students may continue with advanced language acquisition papers and choose from a range of papers on Spanish, Latin American, European and global cultures. Students can complete an honours degree in Spanish, with a research component focusing on a specific aspect of Latin American or Spanish culture and/or literature and linguistics. Most students studying for honours spend one semester at a partner university in Latin America or Spain as part of their programme of study.

It is also possible to pursue an MA, PGDip or PhD in Spanish at Otago.

### **Sport and Exercise Nutrition**

The links between diet, daily physical activity, exercise and athletic performance are recognised in many areas of sport, nutrition and human health. The Sport and Exercise Nutrition major in the Bachelor of Applied Science is the first qualification in New Zealand that focuses on these fundamental linkages. Sport and Exercise Nutrition provides a thorough knowledge base in all aspects of nutrition and relevant



## Sport and Exercise Nutrition

"I work for a running website as their resident nutritionist and I also have my own business developing nutrition plans and evaluations for athletes. I'm always applying what I learned in my studies at Otago – that knowledge with nutrition is powerful, and that the right foods will help athletes train harder, reduce injury and improve their performance."

### Alice Sharples

Bachelor of Applied Science (Sport and Exercise Nutrition and Consumer Food Science) Nutritionist areas of exercise and sport science, drawing on interdisciplinary content from the Department of Human Nutrition, and School of Physical Education, Sport and Exercise Sciences.

If you are interested in a career in Sport and Exercise Nutrition, contact the programme director, Dr Tracy Perry (tracy.perry@otago.ac.nz).

### **Sport and Leisure Studies**

See Physical Education for details on admission into this major.

The Sport and Leisure Studies major uses sociopsychological and sociocultural perspectives to examine the role, purpose and status of sport, leisure and physical activity in everyday life. Subject areas include: Sport Management and Policy; Sport and Exercise Psychology; Sport Media and Culture; Sports Coaching; Sport Sociology; Sport History; Body Culture; Sport, Leisure and Social Theory; and Māori Physical Education.

A review of these programmes is currently being undertaken and they are expected to change. Please see the School's website for the most up-to-date information: physed.otago.ac.nz/

### Career opportunities

The Sport and Leisure Studies major enhances students' technical, critical and problem-solving skills. These skills have enabled recent graduates to gain employment in: national and regional sports organisations and trusts; city councils; sports-related businesses; sport media; and tertiary institutions. Some of the roles graduates have taken up are: sport managers and marketers; sport/exercise psychology consultants; sport and social policy advisers; journalists; and recreational planners.

See the graduate career diagram for inspiration – physed.otago.ac.nz/prospective/careers.html

### **Sports Technology**

Our top sports organisations recognise the importance of sporting technology in ensuring New Zealand's competitiveness in sport and have confirmed their support of the Bachelor of Applied Sciences in Sports Technology. This degree delivers many benefits:

- the development of new ideas, including products and technology-based services
- engagement with entrepreneurs and businesses
- collaboration with key partners locally and internationally.

Students will be able to develop a range of practical skills, scientific and technical knowledge that is suited to the diverse employment opportunities that exist in this exciting area of development.

Sports Technology is an incredibly diverse, interdisciplinary field. Teaching and research in technologies associated with sport already occur in a number of disciplines including Clothing and Textile Sciences, Computer Science, Medicine, Human Nutrition, Physical Education, Physics, Physiology, Physiotherapy and Psychology - leading research into fields such as artificial intelligence and the modelling of movement, measuring and assessment of balance, performanceenhancing clothing and equipment, brainblood flow neurophysiology, eye movement registration, and the broadcasting of sporting events (e.g. 3D animation).

Sports Technology can be taken as either a major or a minor subject within the Bachelor of Applied Sciences. There are several recommended pathways to choose from specialising in topics such as human performance, clothing and design, and computational modelling.

### Major subject papers required

PHSE 102, HUBS/PHSE 191, 192, one from STAT 110, 115, MATH 151, 160, 170, COMP 150, COMP 160, DESN 101, MATH 170, PHSI 191.

.....

### **Statistics**

Data is being generated at an astonishing rate in science, business and government. Statistics is the collection, analysis, interpretation and visualisation of data. Both the analysis and the meaningful use of data are crucial for society and business in the 21st century.

Statisticians work with researchers in a wide range of scientific disciplines, including biological, environmental, health and social sciences. Statisticians are key contributors to decision-making by government and industry.

Students study Statistics as their major because they are looking for skills that are applicable in a wide variety of areas, or because they wish to enhance their employment prospects, often by completing double degrees.

Statistics can also be studied at all undergraduate levels as a minor or a prerequisite for other majors.

#### Career opportunities

Graduates work in government departments, non-government organisations (NGOs), research institutes and private industry in New Zealand and overseas. Employers include health organisations, pharmaceutical companies, insurance companies, consulting firms, Crown Research Institutes (e.g. Scion, AgResearch, Plant & Food Research, and Landcare) and the New Zealand government (e.g. Treasury and Statistics New Zealand).

### 100-level papers

If you intend to major in Statistics (BA, BASc or BSc) you must take the following 100-level papers:

**STAT 110** Statistical Methods and **MATH 160** Mathematics 1 (unless exempt)

**MATH 170** Mathematics 2

Introduction to Biostatistics

STAT 110 Statistical Methods

**STAT 115** 

Covers methods of data analysis and research design principles for the biological and social sciences. Required for several other subjects.

**STAT 115** Introduction to Biostatistics

Provides an understanding of the scientific method and data analytic skills in all the Health Science subjects, including Nutrition, Pharmacology, Epidemiology, Physical Education and Psychology.

### 200-level and beyond

Statistics also combines well with other subjects – for instance, with joint majors in Mathematics, Economics, Finance, Marketing, Pharmacology, Psychology, Zoology, Nutrition and Epidemiology.

Students have easy access to the latest statistical software (R, SPSS).

### Surveying

Surveyors have indoor and outdoor elements to their work and are involved in four main activities including: precise measurement of position; boundary definitions, land ownership and land rights; land and resource management including planning, urban design, subdivision design and engineering; and geographic information science including the capture, display and management of spatial information.

### Career opportunities

The BSurv degree is the only academic qualification offered in New Zealand that will lead to licensing by the Cadastral Surveyors Licensing Board – a licence to carry out land title surveys that is also recognised by all Australian states. It can also lead to full Professional membership of the New Zealand Institute of Surveyors.

Graduates are employed in such diverse areas as measuring land and builtstructure deformation; the design, layout and construction of subdivisions and services; property management; planning; hydrographic surveying; mining and construction surveying; and the application of geographic information systems.

### 100-level papers (Surveying First Year (BSc) programme).

If you wish to be considered for admission to second-year studies leading to a BSurv, you must normally have passed the following papers:

MATH 160 Mathematics 1 **SURV 101** Introductory Surveying **SURV 102 Geospatial Science** ENGL 228 Writing for the Professions and further elective papers worth at least 54 points.

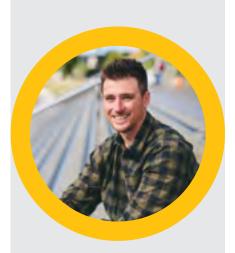
Note: SURV 101 is also available as a distancetaught paper in the second semester.

Admission to second-year classes is competitive. Applications must be received by 15 November of your first year for entry into the second year of the BSurv degree. A maximum of 60 places are available in the restricted paper SURV 298 Introductory Field Course. The School of Surveying offers up to two \$1,000 scholarships to the students with the best academic record in their first year.

### 200-level and beyond

The remaining three years of the Surveying professional course involve 18 core papers, including, among others, measurement technology and processes, civil engineering, urban design, professional practice, land law, project management, satellite remote sensing and photogrammetry and geographic information systems.

The degree has an elective component of 126 points, 54 of which must be advanced surveying electives. Options for these are hydrographic surveying, engineering surveying, remote sensing and resource mapping, spatial databases, environmental engineering, urban design, land tenure



### Surveying

"Surveying is rewarding because it presents practical and academic challenges that require innovative solutions. I love the diversity of subjects that surveying covers, and the variety of work that it involves; one day you might be re-establishing a farm boundary in the middle of nowhere, the next you could be preparing subdivision resource consent applications in the office. And who wouldn't want to get outside and use cuttingedge technology?"

### Julian Thom

Studying towards a Bachelor of Surveying with Honours

and spatial information management. A significant portion of time is spent in practical work.

### Other degrees

There are BSc majors in Land Planning and Development, and Surveying Measurement, and a BAppSc in Geographic Information Systems. These degrees allow students to focus their careers at an early stage. If you wish to take any of these majors, please contact the School before enrolling (surveying@otago.ac.nz).

### **Surveying Measurement**

The BSc degree in Surveying Measurement focuses on the precise measurement of position applied to land, the sea floor and built structures. This degree may also be used as a basis for becoming an internationally qualified hydrographic surveyor.

### Career opportunities

Career opportunities exist wherever there is a need for accurate spatial information or precise position measurement. Graduates may specialise in engineering surveying including road and building set out, underground mining, and tunnelling. These skills are internationally generic and may be applied in any country and in a variety of contexts.

### 100-level papers

In order to be admitted to the second year studies of the BSc in Surveying Measurement, you must have passed the following papers:

MATH 160 Mathematics 1
SURV 101 Introductory Surveying
SURV 102 Geospatial Sciences
ENGL 228 Writing for the Professions
plus three other papers of your choice
(54 points)

In order to continue beyond the first year, candidates must compete for a place in the SURV 298 Introductory Field Camp with BSurv candidates. There is a total of sixty places available. Students must apply formally for this paper by 15 November of their first year.

### 200-level and beyond

200-level courses that are required are SURV 201 Surveying Methods 1, SURV 202 Surveying Mathematics, SURV 208 Introduction to Geographic Information Systems and the SURV 298 Introductory Field Camp.

300-level courses that are required are SURV 301 Surveying Methods 2, SURV 302 Geodetic Reference Systems and Network Analysis, SURV 309 Introduction to Remote Sensing Technologies and SURV 399 Third Year Field Course, and two further advanced surveying papers from a specified range, depending on the student's particular interests.

Students may then complete the requirements for the degree by gaining further points from subjects of their own choice.

Note: Students wishing to undertake this degree should contact the School of Surveying before enrolling.



### **Teaching**

A teaching degree from Otago gives you the contemporary theory, curriculum knowledge and in-class experience needed to become an outstanding teacher.

You can study initial teacher education (ITE) at University of Otago College of Education (UOCE) campuses in Dunedin or Invercargill. Our ITE programmes qualify graduates to apply for registration as teachers in the early childhood, primary, and secondary education sectors.

### Early Childhood Education

Early Childhood Education is for people wanting to teach in early childhood centres and/or kindergartens in New Zealand and

overseas. A degree in Early Childhood Education addresses professional teaching issues, planning for children's learning in the early years, education theory, practical teaching experience, and working in partnership with children's parents and whānau in the context of the curriculum Te Whāriki.

#### Programmes offered are:

- Three-year Bachelor of Teaching (BTchg) degree endorsed in Early Childhood Education— offered at Dunedin and Invercargill campuses
- Graduate Diploma in Teaching (GradDipTchg) Early Childhood Education.

Requires a completed degree for entry – offered at Dunedin campus only.

### **Primary Education**

Primary Education is for people wanting to teach in primary and intermediate schools in New Zealand and overseas. A degree in Primary Education addresses professional teaching issues, subject knowledge, education theory, practical teaching experience and the requirements of the New Zealand Curriculum

#### Programmes offered are:

- Three-year Bachelor of Teaching (BTchg) degree endorsed in Primary Education— offered at Dunedin and Invercargill campuses.
- One calendar year Master of Teaching and Learning (MTchgLn) endorsed in Primary Education – requires a degree for entry – offered at Dunedin campus only.

### Te Pōkai Mātauranga o te Ao Rua (Primary Bicultural Education)

This comprehensive primary bicultural teacher education programme enables graduates to teach in Māorimedium or English-medium primary and intermediate schools, with an emphasis on Te Reo me ngā Tikanga Māori. Taught

from a kaupapa Māori perspective, the programme addresses professional teaching issues, subject knowledge, education theory, practical teaching experience and the requirements of the New Zealand Curriculum and Te Marautanga o Aotearoa.

#### This programme is:

 Three-year Bachelor of Teaching (BTchg) degree endorsed in Te Pōkai Mātauranga o te Ao Rua (Primary Bicultural Education) — offered at Invercargill campus only.

### Secondary Education

Secondary Education is for people who want to teach in secondary schools throughout New Zealand and many overseas countries. Applicants must have relevant subject content in their bachelor's degree to teach NZ curriculum subjects at junior and senior levels.

### Programmes offered are:

 One calendar year Master of Teaching and Learning (MTchgLn) endorsed in Secondary Education – requires a degree for entry – offered at Dunedin campus only.

### Admission to all UOCE teacher education programmes

Admission to all teacher education programmes is restricted – you must apply and be offered a place. The application process includes an online application, identity verification, referees' reports, police vetting and an interview following short-listing.

Applicants must meet academic requirements and demonstrate personal and professional qualities essential for teachers.

Programme application closing dates vary: Master of Teaching and Learning applications are due in July and undergraduate teaching programme applications are due by August 31. Please see the College of Education website for details on closing dates for each programme.

### TESOL (Teaching English to Speakers of Other Languages)

The study and practice of Teaching of English to Speakers of Other Languages (TESOL) are significant elements of the international education industry in New Zealand. English is the global lingua franca, the language learned and used by more second language speakers than any other language and the language most widely distributed across the world. TESOL practitioners are required worldwide and TESOL practitioners trained in English-speaking countries are highly valued. The TESOL minor is a useful option for students intending to make a career of teaching English as a foreign language in New Zealand or overseas. It is also very useful for someone seeking temporary employment while travelling abroad for an extended period.

TESOL is available as a minor subject in a Bachelor of Arts (BA), Bachelor of Performing Arts (BPA), Bachelor of Commerce (BCom), Bachelor of Theology (BTheol), Bachelor of Applied Science (BAppSc), Bachelor of Science (BSc) or Bachelor of Arts and Science (BASc) degree.

The following papers are required for the minor in TESOL:

#### 100-level papers

LING 111 Language and Its Structure
LING 112 Social Aspects of Language

### 200-level papers

LING 231 Teaching of English to Speakers of Other Languages

One of LING 214 Syntax or LING 215 Phonology or EDUC 252 How People Learn

### 300-level papers

# One of LING 319 Second Language Acquisition or LING 331 Advanced Topic in TESOL or LING 332 TESOL Practicum

Note: This minor cannot be taken in conjunction with the major in Linguistics (which includes it), but can be taken in conjunction with the major in English and Linguistics, the major in Language and Linguistics or any other major subjects.

### **Theatre Studies**

Theatre explores and represents human experience and imagination in a dynamic, immediate and relevant way. Theatre Studies will help you to develop such skills as self-confidence, teamwork, communication and creative expression, as well as giving you the chance to reflect on and inhabit lives vastly different from your own.

Drawing on the rich diversity of theatrical expression across time and cultures, Theatre Studies at Otago offers an exciting, stimulating combination of practical skills and academic training, preparing you to present yourself across a wide variety of careers both within and far beyond theatre and the performing arts.

Theatre Studies has its own lively performance venue, the historic Allen Hall Theatre. You will be fully involved in the theatre's extensive programme of productions, including our unique Lunchtime Theatre, which occurs most Thursdays and Fridays during the first and second semesters.

### Career opportunities

In addition to careers in the theatre, film and television industries, graduates work in such fields as teaching, journalism, broadcasting, marketing, design, tourism and arts administration.

#### 100-level papers

If you intend to major in Theatre Studies (BA or BASc), you must take the following 100-level papers:

THEA 122 Drama on Stage and Screen

THEA 151 Improvisation

THEA 152 Theatre Technology (not necessarily taken in the first

year)

#### THEA 122 Drama on Stage and Screen

Introduces conventions and techniques of drama, using texts drawn from theatre and cinema. The texts represent a variety of dramatic genres from a wide range of periods and cultures, and include some "paired texts" – plays and films based on those plays. There is an emphasis on performance, with comparisons of different approaches for stage and screen. You will develop the skills of textual analysis for page, stage and screen and become more proficient in academic writing. You will also attend theatre performances, film screenings and have opportunities to perform scenes from plays.

#### THEA 151 Improvisation

Focuses on understanding the value of improvisation as a tool for actors and theatre-makers. You will acquire skills in communication, freeing the imagination, exploring spontaneity and developing awareness of how to work in a group. Students from many disciplines – including Law, Education, Commerce, Music, Dance, Physical Education, English, and Film and Media Studies – enrol for this paper.

### THEA 152 Theatre Technology

Introduces students to the technology of theatre, including the design and operation of lighting, the use of audio technology and creation of soundscapes, as well as the responsibilities and skills involved in stage management. Students put these skills into practice by working on our weekly Lunchtime Theatre productions. Numbers are restricted.

Another recommended paper is:

### THEA 153 Voice and Movement

Voice and movement are fundamental to the way we communicate with the world. These modes of expression are in turn linked to the wider notions of gender and representation. This paper introduces theories, issues and skills related to communication with a practical focus on the development and refinement of body and voice as a "performance instrument".

### 200-level and beyond

200- and 300-level papers teach a variety of performance and theatre-making skills as well as theatre history, analysis of plays, and performance and critical theory.

The core second-year paper THEA 221 Theatre: Ancient to Contemporary surveys Western theatre and teaches concepts that will form a foundation for further study in the subject. You'll choose from a range of 200- and 300-level papers to make up the rest of your theatre studies major. Some papers investigate aspects of theatre and performance in a practice-led way. Here you will learn about concepts including: approaches to actor training, performing Shakespeare, playwriting, creating bicultural theatre, directing, and design for theatre and performance. Other papers include: Music and Theatre, Theatre of Australasia, Aspects of Modern Drama and Theatre, and Performance Research.

Student numbers are restricted in some 200- and 300-level papers including: THEA 241 Playwriting, THEA 341 Advanced Playwriting, THEA 351 Performing Shakespeare and THEA 352 Directing.

Theatre Studies also offers a full postgraduate programme, including honours, PGDipArts, MA, MFA and PhD, all of which may be undertaken using traditional research methods or through creative practice-led research.

### Theology and Religion

See Religion.

Theology is concerned with the study of Christianity; Religion uses methods from history, philosophy, anthropology, sociology and politics to study all religions as products of human culture. Theology is studied by students from a variety of backgrounds regardless of whether or not they have a Christian faith of their own. The primary qualification for entry is an interest in religious questions. Theology



### Theatre Studies

"I left high school with a passion for theatre but no clear path to follow. At Otago I discovered my niche in directing, producing and publicising, and graduated with a firm understanding of my own place in theatrical history. The knowledge of what has come before me, and what is happening in theatres around the globe, inspires and informs my own practice – a practice that was honed and developed within the walls of Allen Hall Theatre."

### Iordan Dickson

Bachelor of Arts with Honours (Theatre Studies) Marketing Manager, Fortune Theatre

papers can lead to a BTheol or BA degree, or form part of a degree in Science, Commerce, Teaching or Law.

There are three subject areas within Theology:

- 1. Biblical Studies (BIBS) explores the Jewish and Christian Scriptures, looking at the origins of the biblical writings and the history of their interpretation. The study of Hebrew or Greek is required to proceed to postgraduate study in BIBS.
- 2. Christian Thought and History (CHTH) deals with the Christian faith and the historical development of the Christian Church. It looks at Christian beliefs from historical, philosophical and ethical standpoints.
- 3. Pastoral Studies (PAST) concentrates on the theory and practice of Christian ministry and spirituality.

### Career opportunities

Graduates develop valuable skills in critical thinking, research and communication. They go on to careers in any number of roles: teaching, social work, journalism, librarianship, administration, aid and development agencies, government department work, and church leadership and ministry.

#### 100-level papers

If you intend to complete a Bachelor of Theology (BTheol) degree, you must take the following 100-level papers:

**BIBS 112** Interpreting the Old Testament **BIBS 121** Interpreting the New Testament The History of Christianity **CHTH 102** CHTH 111 **Doing Theology** CHTH 131 God and Ethics in the Modern

World and either RELS 101 Introduction to Judaism, Christianity and Islam or RELS 102 Introduction

to Hinduism and Buddhism

If you intend to major in Biblical Studies (BA or BASc), you must take the following 100-level papers:

**BIBS 112** Interpreting the Old Testament **BIBS 121** Interpreting the New Testament If you intend to major in Christian Thought and History (BA or BASc), you must take the following 100-level papers:

CHTH 102 The History of Christianity and either **CHTH 111** Doing Theology

**CHTH 131** God and Ethics in the Modern

World

### Distance Learning

Theology papers are also offered by the University's Distance Learning programme and may be credited to a BTheol degree or Diploma for Graduates. Most papers are taught by way of videoconference, but a few are available as one-week intensive courses.

### **Tourism**

Tourism is one of New Zealand's leading industries. It offers unparalleled opportunities to contribute to a sustainable economy and confirm New Zealand's "100% Pure" global brand positioning and is a global growth industry. The Tourism degree has a strong business emphasis, as well as paying close attention to the ethical, cultural, social and environmental dimensions of tourism.

The BCom (Tourism) critically explores multiple and dynamic facets of the international tourism industry. This innovative major prepares you for careers in tourism and related industries by exploring the effects and ongoing planning and management issues associated with tourism at both destination and business levels, in New Zealand and globally. Studying Tourism is also about understanding those people who visit a destination as well as understanding ourselves, as tourists and travellers, and our role in the global economy.

### Career opportunities

As a graduate you might work in government ministries (tourism policy and planning), regional and national



### **Tourism**

"As Assistant Manager of the first luxury hotel to be opened in Wellington in more than 15 years I have to be a quick-thinking problem-solver. I manage the operational side of the business, working to ensure any customer requests have a positive outcome. I love engaging with travellers from all over the world, and AccorHotels' vast global network means my career and travel opportunities are virtually limitless!"

### Joshua Fan

Bachelor of Dental Technology and Diploma for Graduates (Tourism)

Assistant Manager, Sofitel Wellington

tourism organisations (e.g. tourism and marketing), businesses (e.g. adventure, ecotourism, guiding, interpretation, visitor management), events, conference and convention management, interpretation, accommodation and facilities management, heritage management, and in visitor attractions such as museums, art galleries and wineries.

### 100-level papers

For a Bachelor of Commerce majoring in Tourism, you must complete the following papers (and also meet BCom degree requirements, including the completion of all BCom core BSNS papers — see the Business and Commerce entries for details):

TOUR 101 Introduction to Tourism and either

TOUR 102 Global Tourism

TOUR 103 Introduction to Hospitality

### 200-level and beyond

200- and 300-levels provide a range of papers that build upon the knowledge gained at 100-level. At 200-level core courses cover subjects such as tourism destination management, enterprise management and tourist behaviour. At both 200- and 300-level, there are opportunities to begin to specialise with papers on subjects including wine business and tourism, conventions and events management, cultural and heritage tourism, tourism product development, accommodation management, ecotourism and sustainable development, and sport tourism.

### Toxicology

See Pharmacology and Toxicology.



### Wildlife Management

The Postgraduate Diploma and the coursework Master of Wildlife Management are open to all graduates, although preference may be given to students with some Biology or Ecology in their degrees. Applicants should have a minimum B+ average over their four best relevant 300-level papers.

### Career opportunities

The major objective of the Wildlife Management programmes is to train students with the skills necessary for employment in some aspect of wildlife or ecological management research. Recent graduates have found positions in government ministries, the Department of Conservation, Crown Research Institutes, Fish and Game Councils, regional and local authorities, private wildlife management consultancies and community-led restoration projects.

#### 100-level and beyond

There are no undergraduate Wildlife Management papers. Students not majoring in a Biological Science are recommended to include in their degrees STAT 110 or STAT 115, and ZOOL 316. In addition, ECOL 111, ECOL 211 and ZOOL 319 would be advantageous.

### Writing

The Department of English and Linguistics offers a minor in Writing, which can be taken alongside major subjects in Arts, Science or Commerce, including the major in English. There are papers in Professional Writing, Academic Writing and Creative Writing. Completing this minor demonstrates to prospective employers that a student has mastered the complex writing



### Zoology

"I didn't start out studying zoology but switched my major after taking an animal biology paper that really captured my interest. I've had opportunities I didn't expect I would get as an undergrad, including volunteering in the lab - initially, I was taking care of ant colonies and I'm now studying bumble bee foraging behaviour. I've had great mentors and gained plenty of practical experience to get a head start on a career in research."

Georgia McCombe Studying towards a Bachelor of Science (Zoology) and communication skills they seek. The minor consists of five papers. However, papers may also be taken individually.

The minor in Writing comprises five papers:

ENGL 127	Effective Writing
plus one of:	
ENGL 327	The Essay: Creative Non-Fiction
ENGL 337	Creative Writing: Travel Narratives
ENGL 368	Approaches to Writing about Literature
THEA 341	Advanced Playwriting
plus three of:	•
ENGL 128	Effective Communication
ENGL 217	Creative Writing: Poetry
ENGL 220	Creative Writing: Reading for Writers
ENGL 227	Essay and Feature Writing
ENGL 228	Writing for the Professions
MFCO 220	Writing for the Media
THEA 241	Writing for Stage and Screen
ENGL 327	The Essay: Creative Non-Fiction
ENGL 337	Creative Writing: Travel Narratives
ENGL 342	Digital Literature
ENGL 368	Approaches to Writing about Literature
THEA 341	Advanced Playwriting

Note: ENGL 217, THEA 241 and THEA 341 are limited entry papers.



### Zoology

Zoology studies the biology of animals at many levels: molecular, physiological, structural, evolutionary, behavioural and ecological.

The University of Otago emphasises the diversity and conservation of New Zealand's unique animals and gives an appreciation of how animals function, whether they live on land, in fresh water, in the sea or as parasites.

### Career opportunities

Graduates work in government departments, Ministry for Primary Industries, the Department of Conservation, Crown Research Institutes, regional and local authorities, medical and veterinary laboratories, wildlife and fisheries management, environmental consultancy and education.

### 100-level papers

There are no 100-level Zoology papers. If you intend to major in Zoology (BSc or BASc), you must take the following 100-level papers:

CELS 191	Cell and Molecular Biology
BIOL 112	Animal Biology
and either	
STAT 110	Statistical Methods
or	
STAT 115	Introduction to Biostatistics

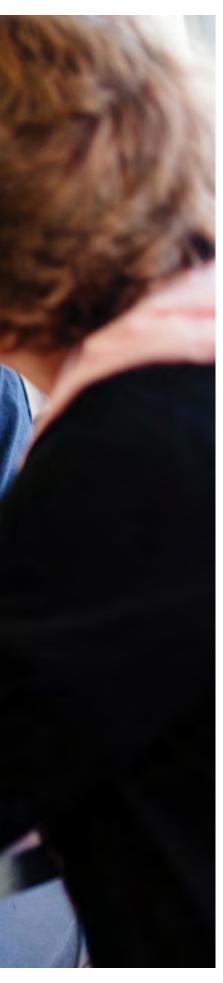
### 200-level and beyond

200-level papers deal with the diversity of animal life, both invertebrate and vertebrate, animal evolution and physiology.

300-level papers deal with freshwater ecology, conservation biology, environmental physiology, neurobiology, behavioural and evolutionary ecology and biological data analysis. Zoology staff also teach 300-level papers in evolutionary and developmental genetics and marine science.

There are postgraduate courses in Ecology, Biotechnology, Environmental Science, Genetics, Marine Science and Zoology. A one-year Postgraduate Diploma and an 18-month coursework Master of Wildlife Management and a two-year Master of Science Communication are open not only to graduates in Zoology, Ecology and other biological sciences, but also to nongraduates with appropriate qualifications or practical experience.





#### **Auckland**

Karyn Floyd and Kitiona Pasene are based in the Auckland office and visit schools in the central and upper North Island.

Grace Latimer, Liaison's Kaitakawaenga Māori, the Māori Liaison Officer, also visits central and upper North Island schools encouraging and supporting young rangatahi to further their education, particularly to study at university.

Elisabeth Degrémont and Diana Patterson support the Auckland team.

Tel 09 373 9704 Email auckland.liaison@otago.ac.nz

### Wellington

Cheryl Caldwell and Prajesh Chhanabhai are based in the Wellington City Office, serving schools in the lower North Island and Nelson, Marlborough and Christchurch.

Margaret Tobin supports the Wellington team.

Tel 04 460 9805 Email wellington.liaison@otago.ac.nz

#### Dunedin

Sandra Spence and Greg Heller are on campus in Dunedin and visit Otago, Southland, Canterbury and West Coast schools, supported by Viv Hepburn.

Tel 03 479 8247 Email liaison@otago.ac.nz

# Kaitakawaeka Māori / Māori Community Liaison Officer

••••••

Frank Edwards is based in the Māori Centre on the Dunedin campus and visits secondary schools and Whare Kura by arrangement in the Otago and Southland region. Frank also attends career expos, community education events, iwi forums and Hui-a-Tau to meet with iwi Māori, rangatahi and whānau.

Tel 03 479 8505 Email frank.edwards@otago.ac.nz

## **Pacific Islands Community Liaison Officer**

Christine Anesone sits within the Pacific Islands Centre on Dunedin campus and visits Auckland, Wellington and Christchurch to meet with the Pacific community, church groups, secondary students and their families.

Tel 03 479 4981 Email christine.anesone@otago.ac.nz

#### **Events and promotions**

For information regarding expos and careers forums, including Otago's annual on-campus Dunedin Tertiary Open Day, please contact:

promos.nz@otago.ac.nz (enquiries from New Zealand) promos.au@otago.ac.nz (enquiries from Australia)

#### Help lines

Teachers can call 0800 80 12 12 with queries or requirements.

For additional copies of this *Prospectus:* 

Tel 0800 80 80 98 or txt 866 Tel 1800 468 246 (Australia)

#### Social networks

To find out about life at Otago you can also follow us on:

•••••••



facebook.com/UOLiaison



twitter.com/Otago



youtube.com/OtagoUniversity



instagram.com/universityofotago



Here are a few extra things you'll find handy to know:

### **Enrolment and accommodation**

The *Guide to Enrolment*, with paper and programme details, is available at all secondary schools from early August each year. It is also available online at:

otago.ac.nz/study/publications

Applications for accommodation can be made online from August at:

otago.ac.nz/about/accommodation

### Make the most of a late start

Mature students (students over 20) who are considering enrolling for the first time, or who are returning to university study after a lengthy absence can make an appointment with a Liaison Officer to discuss the enrolment process, degree structure, and student facilities and services.

Schools' Liaison Office Email liaison@otago.ac.nz Email auckland.liaison@otago.ac.nz Email wellington.liaison@otago.ac.nz

### UniStart @ Otago

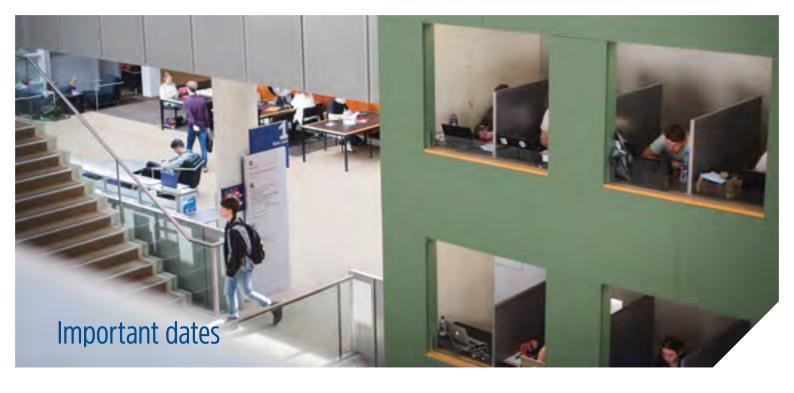
This three-hour new-skills workshop is designed particularly for those who left formal education some time ago and are new to university and tertiary study.

The workshop, which is held in February, includes topics such as:

- · surviving the first few weeks
- using technology
- · note-taking and finding information
- · managing the first assignment
- · balancing life and study
- · a campus tour.

The workshop will be followed up with a one-hour session in weeks 2-7 to support your integration into university life at Otago.

HEDC Student Learning Development Tel 03 479 5786 Email hedc.studentlearning@otago.ac.nz



For the remaind	ler of 2017	2018	
1 August	Residential college applications open online	8 January	Summer School begins
15 August	Applications due for main University of Otago Entrance Scholarships	15 January	Due date for submission of papers for course approval by students taking first semester
31 August	Applications due for Teacher Education programmes (late applications considered)	17 February	and full year papers Summer School examinations begin
1 September	Applications due for Music Performance	19 February	Orientation week begins
	papers	21 February	Course advice day
15 September	Applications due for Bachelor of Radiation Therapy, Bachelor of Oral Health and Bachelor of Dental Technology programmes	22 February	Course advice day Summer School examinations end
30 September	Applications for a place in a residential college should be submitted	23 February	Preliminary lectures held
		26 February	First semester begins
31 October	International student applications due	30 March	Mid-semester break begins
10 December		9 April	First semester resumes
	Applications due for Bachelor of Physical Education programme (late applications	6 June	Mid-year examinations begin
	considered) Applications due for Dux scholarship and	15 June	Applications due from students taking only second semester papers or courses
	Frontiers of Science scholarship Closing date for application for all new and	20 June	Mid-year examinations end
	recommencing students taking Summer	5 July	Second semester course advice day
	School, first semester or full-year papers or courses, and for returning students taking Summer School papers	9 July	Second semester begins
		25 August	Mid-semester break begins
		3 September	Second semester resumes
		17 October	End-of-year examinations begin
		10 November	End-of-year examinations end

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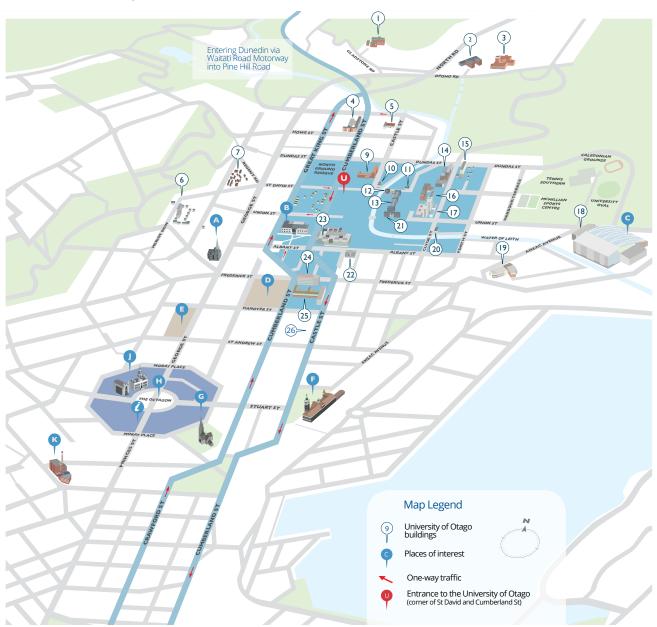
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Support for students

# **Dunedin map**



#### Residential colleges

- 5 Abbey College (postgraduate) - 900 Cumberland St
- 900 Cumberland St Aquinas College 74 Gladstone Rd Arana College 110 Clyde St Carrington College 57 Heriot Row City College 911 Cumberland St Cumberland College 250 Castle St Hayward College 110 Frederick St Knox College Knox St
- 14
- 6
- 4
- 25
- 24
- 3
- 16
- 2
- 9
- 15
- St Margaret's College 333 Leith St Salmond College 19 Knox St Selwyn College 560 Castle St Studholme College 127 Clyde St Te Rangi Hiroa College 192 Castle St 26
- Toroa College 8 Regent Rd
- 17 University College - 315 Leith Walk

#### Campus facilities

- Student Accommodation Centre
- Clocktower Registry Building
- Disability Information and Support 23
- 19 Hocken Collections
- 23 Information Services Building / Central Library
- 21 International Óffice
- 10 Māori Centre - Te Huka Mātauraka
- 22 OUSA Clubs and Societies Centre
- 20 Pacific Islands Centre
- Schools' Liaison Office 12
- Unipol Recreation Centre / Language Centre and Foundation Year

#### Places of interest

- Knox Church
- Otago Museum
- C Forsyth Barr Stadium
- D E Hospital
  - Shopping Malls Railway Station
- G First Church
- Octagon
- Visitor Information Centre
- St Paul's Cathedral /
  - Municipal Chambers
- Speight's Brewery

# Notes





