Canterbury Christ Church University

Changes to previous information

During the global COVID-19 pandemic, we prioritised the health, wellbeing and safety of our students and staff.

As we start the new academic year, your health, wellbeing and safety remains our top priority. This means when we return to our campuses and buildings in September 2020 social distancing and other health and safety measures will be in place. This is to help keep you, and others around you, safe. We will respond to the requirements of vulnerable students regarding their personal safety on an individual basis.

We remain committed to delivering an outstanding education and student experience both on campus and online. Like most universities, we'll be providing a mix of on-site face-to-face and digital learning and teaching. The exact mix will vary between courses and course modules taking into account teaching requirements and other considerations such as meeting the safety of vulnerable staff.

It is important to emphasise that a face-to-face, on-site experience will be delivered within the Government and Public Health England guidance and providing there are no serious unforeseeable public health issues that result in the Government introducing further lockdown measures.

Our response to the pandemic means we may have made changes to your course. This is to take account of these important health and safety measures.

We ask you to read the information provided about course changes carefully. We detail what we include in our online prospectus and explain what has changed.

You should read our statement of changes alongside any information provided in videos, at open days or in other promotional materials. This is because the information may also have been affected by the changes we had to make. We are providing this information so you can make an informed choice about whether the course remains suitable for you.

When you register for your course, you will be asked to confirm you have read about our changes and you agree to them. It means that by choosing to continue with your application, and register with us, you accept these changes and are happy to study your course with us.

We really look forward to seeing you in the next academic year. In the meantime, if you want to find out more about University life from this September, and being part of our supportive and welcoming community, please visit our September 2020 web pages.

	Current published course related information	
Course title	Human Biology	
Award level	BSc - Single honours only	
How do you want to study?		
Start Date	Sept 2020	
Modes of study	Full-time Part-time	
Duration	3 years full-time 6 years Part-time	
UCAS code	B100	
Location	Canterbury	
Partner institution	N/A	
Available with a Foundation Year	Yes	
Overview		
	This exciting area of the sciences is part of a rapidly expanding sector. The course will give you the knowledge and skills suitable for a range of careers and gives you the opportunity to participate in specialist training. You will be taught by experts who have been recognised for their high-quality teaching, ensuring that you are studying up-to-date and relevant material. You will also enhance your practical skills with a significant amount of laboratory work as part of the course. You will explore areas including human anatomy and physiology, human health and disease, human genetics, and sport and exercise training. You will also have the chance to gain further skills as part of our 'Added Value' programme and collaborate with biotech companies through the Life Sciences Industry Liaison Lab and advisory companies such as FAST Brogdale.	Please note that the optional 'Added Value' programme will depend on the current situation with COVID-19. There will still be a focus on the development on practical skills in the laboratory. Practical sessions will be supported by supplementary online demonstrations of key laboratory techniques. In the event of further COVID 19 interruptions, further face to face contingency arrangements are planned to support student learning. Opportunities to work with employers will depend upon the current COVID-19 situation.
Why study Human Biology?		
	If you're interested in studying the structure and function of the human body along with	You will still develop practical skills through lab work throughout your

	sport and exercise physiology, then this is the course for you. Our Human Biology course combines the life sciences that are underpinned by fundamental biology with aspects of sports science, making it a challenging and highly appropriate degree if you are planning a career in scientific research or healthcare. You'll develop strong practical skills through extensive lab work including sessions at our Life Sciences Industry Liaison Lab. The lab is located on Kent's leading science business park, Discovery Park, which is a thriving part of the South East's life science community. Here you'll be surrounded by scientists involved in research and development in the life sciences industries and you'll be able to gain valuable experience to help your CV stand out from the crowd. Throughout the course, you'll receive interdisciplinary expert research informed and involved teaching in a variety of core topics specifically relevant to human form, function and disease. You'll also benefit from guest lectures and seminars delivered by professionals in the scientific and healthcare industry. You'll learn how to apply a theoretical scientific knowledge base to active research areas that address contemporary challenges in society. Our staff have been recognised for their delivery of high quality teaching through a Team Award in the University's Teaching and Excellence award scheme.	degree. Practical sessions will be supported by supplementary online demonstrations of key laboratory techniques. In the event of further COVID 19 interruptions, further face to face contingency arrangements are planned to support student learning. Whether sessions run at the Industry Liaison Lab will depend on the situation with COVID-19. Guest lectures and seminars may be delivered in online sessions where applicable.

Entry requirements	A typical offer would be 88-112 UCAS Tariff points, including an A2 level at grade C or above (or equivalent) in a science subject.	
About the course		
Year 1	You'll start the course by studying core subjects including biochemistry, evolution and genetics, human anatomy and physiology, sport and exercise physiology, microbiology and human health. These provide you with a firm grounding in scientific knowledge and laboratory skills as well as analytical skills and a knowledge of statistics.	
Year 2	In Year 2, you'll deepen your knowledge of statistics and experimental analysis, and you'll develop your knowledge of molecular biology. You will study nutrition, anatomy and physiology and human disease, and you'll have the option to study human genetics or sport and exercise training. This flexibility will enable you to focus your learning in order to pursue your own individual interests and career aspirations. There is also an optional work placement module where you can gain valuable experience to help build your CV.	The running of the optional Work Placement module at level 5 will depend upon the COVID-19 situation in the summer of 2022.
Year 3	In Year 3, you'll be able to demonstrate your scientific competence and independence by devising and undertaking a piece of novel research which will be presented as a fully referenced scientific paper and in the form of an oral presentation of a poster. You'll learn about human reproduction and development as well as current science issues relevant to human biology and you'll be able to tailor your learning by choosing from optional modules covering bioinformatics, immunology and cancer biology, exercise, sporting extremes and nutrition.	
Module information Please note that the list of optional modules and their availability may be subject to change. We continually review and where appropriate, revise the range of modules on offer to reflect changes in the subject and ensure the best student experience. Modules will vary when studied in combination with another subject.		
Core year 1		

	Biochemistry Core module - (20 Credits) You will be introduced to the basic concepts and chemical foundations of biochemistry and cell biology to develop your understanding of structure and function of animals at the molecular level. You will be introduced to the basics of immunology and endocrinology and you'll undertake a number of practicals based on the theory you have learnt.	The practical sessions associated with this module are part of an intensive practical week. The practical week will be supported by supplementary online demonstrations of key laboratory techniques. In the event of further COVID 19 interruptions, further face to face contingency arrangements are planned to support student learning.
	Genetics and Evolution Core module - (20 Credits) You will learn about key concepts in genetics and evolutionary biology, providing you with a broad knowledge of Mendelian genetics and the mechanism of evolution. You will undertake a number of practicals in cell biology and DNA methods and will utilise bioinformatics to access, evaluate and interpret genetic and phylogenetic data.	This practical sessions associated with this module are part of an intensive practical week. The practical week will be supported by supplementary online demonstrations of key laboratory techniques. In the event of further COVID 19 interruptions, further face to face contingency arrangements are planned to support student learning.
	Human Anatomy and Introduction to Human Physiology Core module - (20 Credits) You'll learn how Homo sapiens have evolved into a complex overall form that is made up of several coordinated physiological systems. You'll explore both the macro- and micro-anatomy of the key physiological systems that govern all essential processes required to support normal, healthy human function. You'll also explore how each system is specially adapted for specific roles.	The practical sessions associated with this module are part of an intensive practical week. The practical week will be supported by supplementary online demonstrations of key laboratory techniques. In the event of further COVID 19 interruptions, further face to face contingency arrangements are planned to support student learning.
	Introduction to Sport and Exercise Physiology Core module - (20 Credits) You'll explore the physiological basis of sport and exercise, through both theoretical and practical experience. You'll learn about human physiology and metabolism with specific reference to the topic of energy and	Practical experience may depend on the situation with COVID-19.

	the body's responses to sport and exercise.	
	Microbiology and Human Health Core module - (20 Credits) In this module, you'll develop an understanding of how microorganisms can influence both human health and disease. You'll develop knowledge of the classification of microorganisms as well as an overview of the general features of microbial anatomy and physiology. You will also develop laboratory skills in aseptic technique.	The practical sessions associated with this module are part of an intensive practical week. The practical week will be supported by supplementary online demonstrations of key laboratory techniques. In the event of further COVID 19 interruptions, further face to face contingency arrangements are planned to support student learning.
	Science Skills and Introduction to Statistics Core module - (20 Credits) You will develop the necessary background in science communication, skills and methods essential for a degree in life sciences. You will learn how to analyse quantitative biological data, including statistics and experiment design and how to understand scientific publications and write scientific papers.	
Optional year 1		
	N/A	
Core year 2		
	Advanced Human Physiology Core module - (20 Credits) You'll develop a deep understanding of how the key anatomical and physiological systems are combined and coordinated to ensure normal, healthy human function. You'll explore how these systems act together to sustain human life. This will form the basis for further study of how dysfunctional anatomical and physiological structures and processes lead to disease, which is covered in the Human Disease module in semester 2.	The practical sessions associated with this module are part of an intensive practical week. The practical week will be supported by supplementary online demonstrations of key laboratory techniques. In the event of further COVID 19 interruptions, further face to face contingency arrangements are planned to support student learning.
	Data Handling Core module - (20 Credits) In this module, you'll develop the techniques necessary to handle quantitative biological data analysis and you'll start to explore bioinformatics. You will be	

	introduced to the powerful statistical programming language, R, which is critical to current approaches to handling/analysing data, particularly “big data”.	
	Human Disease Core module - (20 Credits) You'll explore the aetiology and pathobiology of a number of disease processes specifically relevant to human biology and public health. You'll develop a detailed understanding of the processes that underpin the occurrence of disease and how the process of ageing may be relevant.	The practical sessions associated with this module are part of an intensive practical week. The practical week will be supported by supplementary online demonstrations of key laboratory techniques. In the event of further COVID 19 interruptions, further face to face contingency arrangements are planned to support student learning.
	Molecular Biology and Biotechnology Core module - (20 Credits) This module offers you a unique practical experience of diverse laboratory skills associated with the isolation, handling and manipulation of DNA and proteins. You will cover the main areas of theoretical molecular biology knowledge and its practical applications in current research.	The practical sessions associated with this module are part of an intensive practical week. The practical week will be supported by supplementary online demonstrations of key laboratory techniques. In the event of further COVID 19 interruptions, further face to face contingency arrangements are planned to support student learning.
	Nutrition for the Exercising Human Core module - (20 Credits) In this module, you'll develop an understanding of nutritional factors which can influence health, fitness, and sport performance.	
Optional year 2		
	Human Genetics Optional module - (20 Credits) You'll learn about the structure and organisation of the Human Genome, as well as the regulation of its translation into expressed proteins and resulting phenotypes. You'll build on core knowledge developed in the Genetics and Evolution module.	
	Sport and Exercise Training	

	Optional module - (20 Credits) You'll explore the physiological factors which influence sport and exercise performance, with specific focus on the methods and techniques used to enhance these factors.	
	Work Placement in Human Biology Optional module - (20 Credits) This module provides you with the opportunity to develop key skills and experience while working in an academic/commercial environment or healthcare institution placement directly relevant to the field of human biology. You will be enabled to develop critical reflection skills as you review your own competencies as they expand and diversify.	This optional module may be available depending upon the COVID-19 situation in 2022.
Core year 3		
	Current Science Issues in Human Biology Core module - (20 Credits) You'll develop a wide understanding of how scientific research and developments impact and affect human health and society. This will involve developing independent research and analysis skills as you critique important issues relating to human biology and public health.	
	Honours Project in Human Biology Core module - (20 Credits) In this module, you'll undertake a piece of commercially/socially relevant research. You'll be required to identify an area of human biological research related to the course content and you'll undertake appropriate experiments. During the module, you'll gain experience of carrying out independent research and analysis, as well as presenting findings effectively in two styles: a written scientific paper and a poster presented to a non-specialist audience.	
	Human Reproduction and Development Core module - (20 Credits) You'll gain an in depth understanding of sexual reproduction, including the hormonal control of gametogenesis,	

	ovulation and pregnancy. You'll also learn about the processes that occur during the formation of an infant from fertilisation, through gestation and up to delivery at full term.	
Optional year 3		
	Bioinformatics 1 Optional module - (20 Credits) In this module, you'll develop a systematic understanding of the role of computing in biological research, the fundamentals of molecular biology and the key concepts and techniques in bioinformatics. A major focus will be on computer practicals to reinforce the theory within the interactive lectures.	Computer practical sessions for this module will be online-based. Lectures will be pre-recorded and the theory will be reinforced using interactive online workshops.
	Immunology and Cancer Biology Optional module - (20 Credits) In this module, you will obtain a comprehensive understanding of the biology and genetics of cancer and the role of the immune system in tumour development in humans and other animals. You'll explore a range of medical techniques used to diagnose cancer and you'll study the latest cutting-edge treatments and the molecular mechanism used by those treatments. You will participle in discussions on the impact cancer has on people's lives and how patients are cared for including end of life care.	
	Nutritional Strategies for Sport and Exercise Optional module - (20 Credits) You'll explore nutritional strategies associated with enhancing health, exercise and sports performance. You'll investigate established and contemporary strategies based around broad themes of body weight loss and weight gain, altering substrate use during sport and exercise, and the nutritional challenges faced by specific clients. There will be focus on pre/during/post exercise nutritional strategies and you'll consider practices that are (and are not) supported by a volume of scientific literature. Through laboratory, you'll explore appropriate tools and methods of data collection in this field.	Practical experience may depend on the situation with COVID-19.
	Physical Activity and Health	

	Optional module - (20 Credits) In this module, you will: i) gain an in-depth understanding of the effects of physical activity upon health; ii) develop a deeper understanding of the important 'issues' in the context of physical activity and health and their foundation in the health-related research literature; iii) explore how to prescribe appropriate physical activity to members of the general and clinical population.	
	Sporting Extremes Optional module - (20 Credits) You will consider selected factors that influence an individual's ability to perform strenuous physical activity.	

How you'll learn		
Teaching	You will be taught through a combination of lectures, laboratory practicals, field trips, visits to employers, seminars, guest speaker lectures and practical workshops. You'll also benefit from tutorial sessions where you can discuss your work and progress with an individual personal tutor, and small group seminars focusing on specific topics. The course is designed to support you in becoming a confident, independent learner and some of your learning will be through experimentation and observation. Teaching material is posted on the virtual learning environment. Your actual contact hours depend on the optional modules you select. All courses are informed by the University's Learning and Teaching Strategy 2015-2022.	The practical component will be condensed into an intensive practical week rather than being spread across the semester and so minimise your time on campus due to the COVID-19 situation. The practical week will be supported by supplementary online demonstrations of key laboratory techniques. In the event of further COVID 19 interruptions, further face to face contingency arrangements are planned to support student learning. We will use a "blended learning" approach in your studies that consists of a mix of timetabled face-to-face sessions and intensive practical weeks on campus, together with timetabled interactive workshops online. This will involve "flipped learning" approach, which means that it is essential that you read material, watch video content or undertake tasks in preparation for a session.
Independent study	When not attending lectures, seminars, workshops or other timetabled sessions you will continue learning through self-study. Typically, this involves reading journal articles and books, undertaking research in the library, working on projects, and preparing for coursework assignments/examinations, workshops and seminars. Your module director will direct you towards specific readings and/or activities to complete before class through the virtual learning environment.	
Overall workload	Each 20-credit module requires 200 hours of study which includes formal contact (lectures, practicals, tutorials, workshops), structured independent learning (prescribed reading and/or online exercises) and independent learning.	Each 20-credit module requires 200 hours of study, but the proportion and delivery methods will be more varied. At Level 0 and at Level 4, each module will have 48 hours of face-to-face

	Each module in Year 1 has 60 hours of formal contact, supplemented with 40 hours of structured independent learning. As you develop and become more independent, formal contact and structured learning reduces to 50 hours of contact and 30 hours of structured independent learning per module in Year 2 and 40 hours of contact and 20 hours of structured independent learning per module in Year 3.	contact supplemented by structured independent learning. You will also receive an intensive week (30 hours) of practical laboratory sessions in each semester to give you the essential laboratory skills relevant to your modules. At Level 5, your sessions will be delivered as a blended learning mix of on-campus face-to-face sessions and online interactive class workshops. You will have 9 hours of face-to-face sessions on campus dedicated to your programme with 9 hours of interactive online class workshops. We will employ a “flipped learning” approach where we will expect you to prepare for the online class workshops by undertaking the directed study beforehand. You will also receive an intensive week (30 hours) of practical laboratory sessions each semester to give you the essential laboratory skills relevant to your modules. At level 6 substantial elements of programme delivery will be interactive online delivery using the “flipped learning” approach. Each programme has a 3-hour programme specific session with each module consisting of 12 hours of online interactive workshops. In addition, your Research Project module will have 48 hours timetabled in each semester to enable you to carry out your research.

Academic input	The teaching team consists of highly qualified academics with a range of expertise and experience. They are research-active and have experience in delivering research-informed teaching. All our core team members hold doctoral qualifications and most hold or are working toward postgraduate teaching qualifications. You can find out more about the current teaching on our Meet the Team web page. Postgraduate students sometimes assist in teaching and assessing some modules, however, experienced academics teach the vast majority of lectures and seminars. You should note that members of the teaching team might change.	
How you'll be assessed		
	Assessment is by both coursework and examination. Individual modules are assessed either solely by coursework or by an equally-weighted combination of coursework and examination. Examination allows assessment of a student's understanding of important key concepts and accounts for less than half the assessment of the programme overall. Coursework assessments permit students to develop key scientific and transferable skills and assignments include: scientific lab/log books, written reports, written scientific papers, discursive essays, PowerPoint presentations and poster presentations. There is a maximum of two assessments per 20 credit module studied, each module is therefore assessed by a maximum of two pieces of coursework or by one piece of coursework and an examination. In all cases, feedback on the first piece of assessment will be returned to the students in time to inform the second piece of assessment. **Feedback** You will receive feedback on all practice assessments and on formal assessments undertaken by coursework. Feedback on	Examinations may take the form of take-home online examinations.

	examination performance is available upon request from the module leader. Feedback is intended to help you learn and you are encouraged to discuss it with your module tutor. We endeavour to provide you with feedback as soon as possible following hand-in of formative assessment and within 20 working days of hand-in of formal coursework assessment.	
Year 1	50% coursework 50% exam	
Year 2	70% coursework (core modules) 30% exam (core modules) 50% coursework (optional a) 50% exam (optional a) 100% exam (optional b)	
Year 3	88% coursework (core modules) 12% exam (core modules) 67% coursework (optional a) 33% exam (optional a) 33% coursework (optional b) 67% exam (optional b)	
Fees		
UK/EU	Full-time £9,250	
	Full-time - placement year £1,850	
	Part-time £4,625	
Overseas	Full-time £13,000	
	Full-time - placement year N/A	
	Part-time N/A	

Course specific costs		
	N/A	
Professional accreditation	N/A	
Industry links	The University's Industry Liaison Lab works with many companies in healthcare research and development, drug discovery and equipment design and manufacture. *"Venomtech have been very impressed with our partners at Canterbury Christ Church University, this partnership has enabled us to progress projects much faster than we could on our own. This includes being able to generate novel data on the use of our products through student projects, advancing research into new antibiotics and cancer therapies from venoms and increasing the understanding of invertebrate welfare. Generation of this proof of concept data has, and continues to have, a positive influence with our potential customers and therefore our business. I also impart my 10+ years industrial drug discovery experience directly to the students as part of the Drug Discovery and Development module.* *As a science employer in the area, Venomtech benefit greatly from being directly involved in the curriculum to make sure the new graduates have the skills useful to employers. This includes an understanding of applied drug discovery that will make CCCU graduates stand out from others in job interviews."* **Steve Trim, CEO, Venomtech Ltd**	
Other important information		
Specialist Facilities	This course is associated with the University's Industry Liaison Labs at Discovery Park, Sandwich. You will have the opportunity to undertake laboratory work at this site. The location of these specialist facilities within an industrial setting facilitates access to and collaboration with biotechnology and pharmaceutical companies.	Access to the Liaison Labs at Discovery Park will depend on the COVID-19 situation. All necessary content for your studies will still be available to you.

Date of publishing	29/6/2020	