Kent is one of the UK’s leading universities, producing world-class research and excellent degree programmes.

World-leading research
The School of Biosciences at Kent ranks among the most active in biological sciences in the UK, with research funding at about £3 million per year. Outside bodies have commended the School for its research, which is acknowledged to attain international levels of excellence.

The research in the School is focused on understanding systems and processes in the living cell. It has a molecular focus and covers the disciplines of biochemistry, microbiology and biomedical science. The research projects currently ongoing in the School include: cancer biology and cancer therapies, bioprocessing and the development of novel therapeutics, genetic and prion diseases, reproductive medicine, synthetic biology, protein folding and structural biology, the biology of ageing, molecular motors, and bacterial pathogenesis and sensing.

Our research feeds directly into our teaching, providing exciting and relevant final-year projects, well-equipped and well-resourced laboratories, and ensures that you learn the most up-to-date information available.

Passionate teaching
The School of Biosciences was awarded the maximum score of 24 in its teaching quality assessment, achieving full marks in areas such as the design and delivery of teaching materials, and the support and guidance we give our students. The assessors concluded that the School of Biosciences offers ‘well-designed, flexible and coherent degree pathways, taught by dedicated and enthusiastic staff well-matched to the syllabus and clearly informed by industry and research’.

This reputation for teaching excellence in the School of Biosciences is reflected in the National Student Survey. For example, in 2012, 93% of our students in the School of Biosciences were satisfied with the quality of their course.

The School also has a reputation for innovation. One of our academics, Dr Dan Lloyd, has won a National Teaching Fellowship Award for his work on the School’s communication projects (see p17). These projects enable our science students to give talks in local schools and explain science to the public using various multimedia outlets.
Inspiring topics

Biology is the study of life in all its various forms, from simple viruses to complex organisms such as human beings. It investigates the structures and functions of living organisms and their interactions with the environment and is at the forefront of social change, playing an important role in our everyday life.

Topical subjects covered at Kent include stem-cell research, genetically modified organisms, the influence of mankind on the environment, and health and disease.

Supportive community

Teaching methods include lectures, lab classes and work in small groups (via tutorials, workshops and problem-solving sessions). We also use some self-learning packages.

All students gain extensive practical training and spend up to two days a week in the laboratory. In the final year, there is the chance to conduct an eight-week research project which may be laboratory, library, or communication based, and is integrated with the expertise of the academic staff.

A global outlook

Our School has an international reputation and collaborates with research groups throughout the UK and the rest of the world.

Our students have the option to spend a year studying abroad (see p10). This year can be a fantastic opportunity for personal development and provide an added insight into your subject.

A successful future

In your studies, you gain excellent analytical, communication and numerical skills as well as specialist scientific skills. You have the chance to view science in its wider social context via modules in science communication, business or anthropology. Taking these options can significantly broaden your range of potential career options (see p8 for more details).

We have excellent links with employers such as GlaxoSmithKline, Genzyme, MedImmune and Lonza Biologics, and can offer you a Sandwich Year, which gives you the opportunity to earn a salary for a year, evaluate a potential employer, and enhance your employment prospects. See p14 for details.

Professional recognition

Our Biology degree is recognised by the Society of Biology (www.societyofbiology.org) Students graduating from Society of Biology recognised courses are eligible for Associate Membership and are entitled to two years’ Associate Membership at half price.

DID YOU KNOW?

The School of Biosciences was ranked 12th in the UK for graduate employment by The Guardian University Guide 2013.
SUPERB STUDENT EXPERIENCE

Based on a scenic campus, you have the use of modern teaching labs, with state-of-the-art technology.

World-class study facilities
The £1 million bioscience teaching laboratories ensure that our students have an excellent environment in which to develop their practical skills. The School of Biosciences also attracts a large research budget, which allows us to provide excellent research labs. If you choose to do laboratory research as part of your final-year project (see p17), you will work alongside our world-class research scientists, using the same high-level technology.

Also on campus are good academic facilities, such as the Templeman Library, which houses over a million publications, over a thousand public PCs and a range of study support services for help and advice.

Thriving scientific community
The School often collaborates with research groups throughout the UK and Europe, and within industry. It has excellent links with local employers such as the NHS, GlaxoSmithKline, Genzyme, Aesica Pharmaceuticals, Sekisui Diagnostics and Cairn Research.

Friendly campus
The campus is built on 300 acres of parkland, overlooking Canterbury. Modern buildings are surrounded by open green spaces, courtyards, gardens, ponds and woodland. It’s self-contained and all the main facilities are within walking distance. These include: sports centre, cinema, theatre, night-club, restaurants, cafés, bars, medical centre, pharmacy, off-licence, shop, and bank and laundry facilities. Many students comment on the friendly atmosphere at Kent which allows you to make friends from all over the world.

Beautiful location
Canterbury city centre is only a 20-minute walk or a short bus-ride from the centre of campus. It’s a beautiful city with many stunning medieval buildings and also has lively bars, pubs, restaurants and cafés, and a wide range of shops, from small independent outlets to high street chains.

The attractive coastal town of Whitstable is close by and there are sandy beaches further along the coast. London is under an hour away by train.

A European university
Kent has a diverse cosmopolitan student population with 140 nationalities represented on campus. We have strong links with universities in Europe, and Kent is only around two hours by train from Paris and Brussels.

DID YOU KNOW?
Kent is rated as one of the safest university cities in England and Wales by The Complete University Guide 2013.
Corinne Arnold is working at the Royal Botanic Gardens, Kew, on a sandwich placement before her final year.

What attracted you to studying at Kent?
The Biology course at Kent covers a wide variety of subjects, from microbiology to chemistry to taxonomy. I felt this would give me a fantastic opportunity to decide which I am best suited to. Kent also accepted students who did not have an A level in Chemistry, and offered a catch-up module at Stage 1 to bring you up to the right level. Canterbury is beautiful and the campus is in a great location.

How is your course going?
My course is going brilliantly. I have so far achieved an average of 85% over my first two years and I’m finding the work fascinating.

How would you describe your fellow students?
There is such a variety of personalities at Kent that there will always be someone you will get along with. Most students are willing to help each other and share ideas.

How are you enjoying working at Kew Gardens?
I am having a fantastic time. The staff are very friendly and are always willing to help, no matter how busy they are.

What are you doing at Kew?
I am doing a project which will contribute to my degree, looking at restoring connectivity between areas of chalky grassland across the UK, producing a model profile using the plant species *Pulsatilla vulgaris* which is dramatically declining in numbers. I am doing genetic analysis of the plant’s DNA using microsatellite regions to look for variability within a population and between populations. This will be used to find seeds from plants that can be used to establish new populations. I am working on this project with several other people, one of whom is studying for her PhD in the ecology/fieldwork side of the project, so she is relying on the information I obtain to start some new populations.

How will your sandwich year help your future career?
This year has helped me to perfect my laboratory skills and has made me realise what I am capable of. I have learnt a lot about the chemicals and their properties, as I am receiving one-to-one tuition from my supervisor and other staff in the lab. Within two weeks of starting at Kew, I was able to carry out techniques in the lab that I never thought I would be able to do on my own. I feel that this has prepared me very well for a career after university.

What's next for you?
I would like to do a PhD in either genetics or botany, then work in a botanical research laboratory, as plants are much more interesting than most people would think. In terms of genetics, plants are much more complicated than animals in many ways.

Any advice for other students coming to Kent?
You do not need to know what career you want to do when you choose your degree; university will help you to discover that. I would recommend applying for a sandwich year because it helps you to learn the techniques and science in greater depth. It also gives you a good idea of whether that career is right for you or not. Do not be afraid to ask your lecturers for advice as they are always willing to help.
Many career paths benefit from the numerical, analytical and communication skills that you develop during your studies. Most of our students are highly successful after graduation.

As well as providing a first-rate academic experience, we want you to be in a good position to face the demands of a tough economic environment. We are consistently in the top 20 of graduate starting salaries and, in 2011, only 7% of Kent graduates were without a job or further study opportunity six months after graduation. We pride ourselves on helping students develop transferable skills through their studies.

Common career paths
In recent years, about a third of our graduates have found employment in industrial, university and hospital laboratories. Typical specialisms include biotechnology, molecular biology, pathology, pharmacology, microbiology and ecology.

Another third of our graduates become senior research scientists, working at the cutting edge of scientific exploration. The most common route is to gain an MSc in a more specialised area, or a PhD by joining an established research group. Most students receive full funding to support their scientific work while studying for a PhD.

The remaining third of graduates go on to work in other areas. The skills you gain in your studies are useful in a wide range of careers. In recent years, students have found employment in teaching, scientific publishing, clinical trials, sales, marketing, banking, accountancy, the police force and social work.

Professional experience
Students who choose to take a Sandwich Year (see p14) often find this extra experience enhances their job prospects. They gain work experience and an insight into the professional pathways available. A Year Abroad can also provide a valuable experience and an opportunity for personal development. See p10 for details.

Biology students can opt to take a Summer Studentship to gain additional research skills and widen their experience. These eight-week research projects are held in the summer vacation of the second year – the majority at Kent but with the possibility of some at other universities in the UK or abroad. Studentships are optional and do not contribute to your degree, but allow you to acquire new skills. We have set up a fund (the Stacey Fund) to provide long-term funding for 20 or more studentships each year. All undergraduate students are eligible to apply.

Students also develop professional skills and gain hands-on experience through Kent’s wide range of voluntary work opportunities. See www.kent.ac.uk/employability

Careers advice
The Careers and Employability Service can offer guidance on how to choose your future career, how to perform well in interviews and aptitude tests and provides up-to-date information on graduate opportunities. For more details, see www.kent.ac.uk/careers
Danielle Zelli graduated with a BSc in Biology from Kent in 2010. She is now working at the American Museum of Natural History in New York.

Why did you choose to study at Kent?
I loved the campus and the environment, besides the obvious credentials. I chose this course because I had researched the School of Biosciences and felt their modules were more interesting and thorough than other universities. I was also aware of the excellent research being conducted in the labs by the professors, which intrigued me.

How do the skills you gained at Kent help you in your present career?
The skills I gained at Kent helped me with subsequent lab work I did at Vanderbilt University, through the lectures and practicals, while the group work helped significantly with all areas. Working with other scientists at Kent and giving presentations has helped me to produce great work at the museum. Collaboration and communication is a gigantic part of the bioscience field, and understanding how to do this effectively has always been an advantage for whatever I’ve chosen to go into. I feel the scientists at Kent prepared me very well for this.

How would you describe the teaching at Kent?
The teaching was fantastic. All of my professors were well informed and up-to-date with their areas because they were all involved in research work. There was an obvious passion for their work which showed through their teaching. In the final-year project, I had a wonderful experience working in the labs and was given exceptional guidance with constant confidence building. Having been unsure of my practical lab work abilities, this was the boost that I needed.

What about the academic standards at Kent?
I believe the academic standards at Kent are kept very high. The professors do push the students where necessary and are always there to help. It is clear they want their students to succeed and do their best, which they can allow by supplying all the necessary equipment and assistance for learning with as few boundaries as possible.

How did your career progress after graduation?
After I graduated from Kent, I moved to Nashville, Tennessee, and worked at Vanderbilt University researching circadian rhythms in cyanobacteria and mammalian cells. The following year, I decided to move to New York, where I was hired by the American Museum of Natural History as a live exhibits assistant in the butterfly vivarium, where I worked upstairs with the live animals in the lab and downstairs to educate the visitors about the exhibit and its habitants. When the new exhibit *Spiders Alive!* opened within my department, I was able to move into that and I now give presentations with Chilean Rose Hair tarantulas and Emperor Scorpions to teach the visitors about the biology behind the animals. I handle live arachnids and get to eliminate arachnophobias every day by showing people of all ages the wonders behind these curious creatures. I really love my work. My future plans are to continue collaborating with the museum on new exhibits and do further work on my own online educational web series. I am filming a children’s series on the scientific mysteries of New York City as a personal side project and intend to expand this in the future.

What advice would you give to someone coming to Kent?
I would tell them to make the most of what the University has available to you. From my experience, the professors were helpful, informative, and excited to have enthusiastic students. Get involved, show your interest – and go the extra mile. Every teacher appreciates a hard worker and a shared love for learning. This is your opportunity to show that, and could help exponentially towards your future.
CHOOSING YOUR PROGRAMME

Not sure which degree programme to choose? Here’s a quick guide to the degrees on offer within the School of Biosciences.

Biology
Biology is the study of living organisms and their interactions with the environment. The subject includes socially relevant topics such as stem-cell research and the use of genetically modified organisms. This programme is studied over three years full-time, and you investigate a variety of life forms ranging from viruses and bacteria to complex animals and plants. The degree provides a broad survey of the various biological disciplines, including anthropology, biochemistry, cell and molecular biology, evolution, genetics, infection and immunity, microbiology, and the physiology of animals and plants.

Biology with a Sandwich Year
The degree may be taken as a four-year programme with a paid work placement (Sandwich Year) between the second and final year of study. This can be in the UK or in another country. Recently, students have studied in Germany, the Netherlands and Thailand. It is suitable for students who have a good level of achievement at Stage 1. For international students, holding a student visa entitles you to work in the UK as long as you are still registered as a full-time student. Since the Sandwich Year is a fully-registered part of your degree, this can provide an opportunity for international students to gain a year’s work experience in the UK.

Biochemistry
Biochemistry deals with the way living organisms function at the molecular level. How do living organisms work? How are they built, controlled, repaired and supplied with energy? Biochemistry is an ideal degree if you want to enter a research career in a life sciences area.

International Foundation Programme
If you are applying from outside the UK without the necessary English language qualifications, you may be able to take the Kent International Foundation Programme. We have recently set up a Biosciences strand that leads to progression on to our Biology, Biomedical Science or Biochemistry degrees.

You also need strong results in your national school-leaving qualifications in Biology and, preferably, Chemistry, which will be assessed on an individual basis.

Other degree programmes
The following degrees are also available within the School of Biosciences, with options to study abroad or take a Sandwich Year.

Biomedical Science
Biomedical Science at Kent explores the biochemical processes that occur in the human body, and human diseases like cancer and the body’s response to infection. It offers graduates a chance to put scientific knowledge into practical use within medical health care, in laboratory-based fields within the National Health Service, the pharmaceutical industry or medical research. You can opt to take a programme accredited by the Institute of Biomedical Science (www.ibms.org), which is important for those who wish to work in the NHS.

DID YOU KNOW?
The School of Biosciences offers summer vacation Research Studentships after Stage 2. This can be an ideal opportunity to gain additional lab experience.
STUDYING AT STAGE 1

Stage 1 is the first year of your degree programme.

Your modules provide a broad survey of the various biological disciplines, including biochemistry, biodiversity, cell and molecular biology, and human physiology and disease.

Teaching is via lectures, supervisions, assignments and laboratory classes. Each module involves, on average, 22 hours of lectures, and is supported by three or four practical lab sessions and regular group work.

At Stage 1, you need to reach a satisfactory standard to proceed to the second year. However, no Stage 1 marks are carried forward to your final degree result. Most Stage 1 modules are assessed by 50% coursework and 50% examination.

All students take the following core modules:
- Biodiversity
- Chemistry for Biologists
- Enzymes and Introduction to Metabolism
- Genetics and Evolution
- Human Physiology and Disease
- Introduction to Biochemistry
- Molecular and Cellular Biology
- Skills for Bioscientists.

Modules: Stage 1

Biodiversity
The aim of this module is to introduce the diversity of life, evolution and development of body form in a wide variety of organisms, including prokaryotes, animals and plants.

Chemistry for Biologists
This module covers the topics that underpin the study of bioscience at the molecular level, including the basic concepts of physical, organic and bioinorganic chemistry.

Enzymes and Introduction to Metabolism
The module introduces you to metabolic pathways and the control of metabolism by changes in enzyme activity. It includes the rates of biological processes and the theoretical principles underlying them, the basic structure and function of enzymes and their kinetics. You perform enzyme assays to determine their kinetic properties and also study the key pathways of metabolism in animals and their control mechanisms.

Genetics and Evolution
This module is an introduction to Mendelian genetics and also includes human pedigrees, quantitative genetics and mechanisms of evolution.

Human Physiology and Disease
You consider the anatomy and function of normal tissues, organs and systems in this module. We look at the manifestation of the various conditions at the level of cells,
tissues and the whole patient, and also discuss diagnosis, available prognostic indicators and treatments.

Introduction to Biochemistry
This module provides an introduction to biomolecules in living systems. It contrasts the simplicity of the basic building blocks (amino acids, sugars, fatty acids and nucleotides) with the enormous variety and adaptability of the different macromolecules they form (proteins, carbohydrates, lipids and nucleic acids). It highlights the nature of the molecular structure of the macromolecules and their interactions within the cellular environment.

Molecular and Cellular Biology
You are introduced to the major themes and experimental techniques in molecular biology, genetics and eukaryotic cell biology. The module covers basic cell structure, the principles of the cell cycle and cell division, the control of living processes by genetic mechanisms, and techniques for genetic manipulation, such as gene cloning.

Skills for Bioscientists
Subject-based and communication skills are relevant to all the bioscience courses. This module allows you to become familiar with practical skills, the analysis and presentation of biological data, and introduces some basic mathematical and statistical skills as applied to biological problems. It also introduces you to the computer network and its applications, and covers essential skills such as note-taking and essay writing.
STUDYING AT STAGE 2

Stage 2 is the second year of your degree programme. At this stage, the modules go into greater depth as you develop your knowledge of gene regulation, microbiology, physiology, and human health and disease.

During Stage 2, your marks contribute towards the grading of your final degree.

All students take the following core modules:
- Animal Form and Function
- Cell Biology
- Gene Expression and its Control
- Infection and Immunity
- Microbial Physiology and Genetics
- Physiology
- Plant Physiology and Adaptation
- Skills for Biologists 2.

Modules: Stage 2

Animal Form and Function
You study the diversity of animal life throughout evolution, including elements of functional anatomy and physiology, such as circulation and gaseous exchange, the digestive system, the nervous system and reproduction.

Cell Biology
This module reviews the experimental approaches used to investigate the biology of the cell and highlights the similarities and differences between cells of complex multicellular organisms and microbial cells. Initially, it considers the functions of the cytoskeleton and cellular compartments such as the nucleus. Later in the module, you examine the mechanisms by which newly synthesised proteins are secreted or shuttled to their appropriate cellular compartments.

Gene Expression and its Control
The module deals with the molecular mechanisms of gene expression and its regulation in prokaryotes and eukaryotes. This involves descriptions of how genetic information flows from DNA to RNA to protein, how this flow is controlled in specific tissues and cells throughout development, and how it is disrupted in cancer cells.

Infection and Immunity
You gain an understanding of the major diseases of infectious origin that colonise human body tissues in this module, which covers the principles of epidemiology, and looks at medically important diseases such as the HIV virus and AIDS. The features and functions of immune cells and molecules used in the defence of the body against invading microorganisms are also studied.

Microbial Physiology and Genetics
A review of the structure and biosynthesis of bacterial and fungal cells, their key metabolic processes and their quest for food is included in this module. You also study microbial growth, genome organisation, and the structure and mechanisms of DNA transfer.

Physiology
You develop a more detailed understanding of particular physiological systems in this module, and relate this to relevant disease processes and their detection. The role of research and laboratory methods in understanding human disease is also introduced at this stage.

Plant Physiology and Adaptation
This module provides a general grounding in plant biology, including form and function, photosynthesis, phytohormones, plant defence and adaptation to the environment.

Skills for Biologists 2
You have lectures on biological techniques complemented by practical classes and supervisions. There are sessions on group work, essay-writing, problem-solving and computer-based procedures to develop your transferable skills. In addition, there are presentations on careers to help you start thinking about future career options.
WORK EXPERIENCE: THE SANDWICH YEAR

If you choose to do a Sandwich Year, it comes between Stages 2 and 3.

Excellent links with employers
In the past, our students have taken placements with employers such as GlaxoSmithKline, MedImmune, Lonza Biologics, the Health Protection Agency, Eli Lily and the NHS. The School has established excellent links with these employers, as well as many others.

Finding a placement
Work placements are usually advertised nationally and students apply by sending in a CV or application form. We guide you through the process, giving you valuable feedback on the placements that are likely to enhance your career prospects, how to write a winning CV and how to hone your interview skills.

Salary and benefits
Students usually work on placement for the entire calendar year. Salary and holiday entitlements vary according to the employer. However, many students find that they earn enough to be able to save some of their income, and this often helps them in their final year of study at Kent.

Study and career benefits
A work placement provides practical experience that can be put to good use in your final year of study. It gives you a sense of how the theory works in practice and improves your skills in many areas. It also allows you to evaluate a particular career path and gain knowledge of the working environment.

In general, the Sandwich Year is very popular with employers, because of the skills you gain in the workplace. If your placement is a success, you may even be offered a job with the same employer after graduation.

Keeping in touch with Kent
Your tutor maintains close contact with you during your year away from the University, checking on your progress and paying a visit to your workplace in the first four weeks. All placement students come back on to campus for a day halfway through the year to talk about their work with other students and staff.

At the end of your Sandwich Year, your work is assessed by a written report, presentation and supervisor’s evaluation. This contributes 10% to your overall degree mark.

DID YOU KNOW?
You can spend a year studying abroad as part of your degree. See p10 for more details.
STUDYING AT STAGE 3

Stage 3 is the final year of your degree programme. In addition to your core modules, you complete a research project and have the chance to develop your particular interests.

You take the following core modules:
- Cell Cycle
- Microbial Physiology and Genetics 2
- Research Project (double module).

You also choose four options from:
- Advanced Immunology
- Biological Anthropology – Comparative Perspectives
- Biological Anthropology – The Human Animal
- Biological Membranes
- Cell Communication
- Classification of Living Organisms

- Integrated Endocrinology and Metabolism
- Neuroscience
- New Enterprise Start-up
- Pathogens and Pathogenicity
- Virology.

Modules: Stage 3

Advanced Immunology
Since the discovery of HIV, great progress has been made in our understanding of the immune system. This module looks at topical aspects of this subject, with emphasis on the regulation of the immune response and dysfunctional immune systems in disease states.

Biological Anthropology – Comparative Perspectives
This module provides theoretical and comparative perspectives essential to the study of biological anthropology. It introduces evolutionary theory, along with Mendelian and population genetics, and comparative primatology.

Biological Anthropology – The Human Animal
You undertake a broad survey of ecological adaptation, the human fossil record and human variation placed in a context of the interaction of humans within their environment.

Biological Membranes
Cells and subcellular compartments are separated from the external milieu by lipid membranes with protein molecules inserted into the lipid layer. The structure and function of these two components are diverse, ranging from regulatory functions to maintaining the structure of the cell.

“It is exciting knowing that there is groundbreaking scientific research being done in the same building. Doing research for your Dissertation in the same labs as PhD students was extremely rewarding.”

Charlotte Nisbet
Biology graduate
STUDYING AT STAGE 3 (CONT)

Cell Communication
Communication between cells is essential for the normal function of multicellular systems. This module addresses the diverse mechanisms used by cells to communicate, covering the major classes of signalling molecules, the receptors upon which they act and the associated intracellular messengers.

Cell Cycle
The precise regulation of the cell cycle is essential for all life. In this module, you explore how the current understanding of cellular reproduction emerged, with initial lectures describing the important breakthroughs in cell cycle research. You go on to study the key events that occur and how they are regulated by mechanisms conserved from yeast to man.

Classification of Living Organisms
This module introduces you to the classification of living organisms, and gives you insights into the identification, nomenclature and phylogeny of selected taxa in the plant and animal kingdom.

Integrated Endocrinology and Metabolism
The endocrine system is one of the two great control systems of the body. In conjunction with the nervous system, it is responsible for monitoring changes in an animal’s internal and external environments and directing the body to make adjustments.

Microbial Physiology and Genetics 2
Building upon the second year course Microbial Physiology and Genetics 1, this advanced-level course focuses on how physiological homeostasis is maintained in the bacterial cell in response to environmental stresses.

Neuroscience
The brain is as fascinating as it is complex. This module looks at how the intricate human brain develops early in life, how neural circuits control behaviours as diverse as moving, eating, sleeping and learning, and how abnormal development or function of the nervous system gives rise to disease.

New Enterprise Start-up
This module examines the characteristics required of a business to succeed and the reasons for business failure. It covers business risks and uncertainties, skills required for business ownership, and sources of advice and support for businesses.

Pathogens and Pathogenicity
You study the molecular basis for microbial pathogenesis in relation to bacterial, viral and fungal pathogens. Topics include host-pathogen interactions, therapeutic strategies, vaccination and the role of viruses in the development of cancer.

Virology
This module surveys the full replication cycle of a broad range of viral families, including newly emerging infectious diseases. The module includes interactive discussions on a number of recent scientific publications that highlight the relevant and important issues in the field of virology today.
In your final year of study (Stage 3), you complete the eight-week Research Project. You choose a project that interests you from a wide range of options.

You work independently but have regular meetings with a supervisor who guides you through the process and provides advice and support. This supervisor will be an academic whose research interests are related to your topic.

There are three types of project on offer: a laboratory-based project, a science communication project, or a dissertation-based project.

If you choose a laboratory-based research project, you will usually meet and work with members of your supervisor’s research team. This also gives you the opportunity to use the equipment and facilities within the team’s research lab.

Laboratory-based project

Laboratory projects are offered in all the research areas of the School. The current research projects in the School include: cancer biology and cancer therapies, bioprocessing and the development of novel therapeutics, genetic and prion diseases, reproductive medicine, virology, synthetic biology, protein folding and structural biology, the biology of ageing, molecular motors, and bacterial pathogenesis and sensing.

You carry out original research of interest to your supervisor and their research group. You have the possibility of seeing or discovering something for the very first time and you may even have your work published in the scientific literature.

Example project titles include:
- Genome organisation in sperm nuclei using a novel analysis system
- Multi-coloured imaging of bacterial compartments
- Developing a method for evaluating DNA damage in yeast

Communication project

One of the key challenges facing scientists is to make their work interesting, accessible and relevant to the public. A communication project can develop these key skills and broaden your employment opportunities.

Communication projects are offered in a wide range of topics, which typically will be a poorly understood or controversial area of bioscience. The aim is not only to research the topic and write an up-to-date science report, but also to think about how you can explain your findings to a wider, non-scientific, audience. Communication students put this into practice by giving a presentation in a local secondary school, and also by preparing a website or a written article for a newspaper or magazine.

Recent student communication projects include the following:
- Allergy and the hygiene hypothesis – what are the reasons for the explosion in asthma
- The benefits of probiotics – fad or fact?
- The cheat’s guide to using science to win an Olympic gold medal
- Prions – friend or foe?

Dissertation project

A dissertation project gives you the opportunity to dig deep into the scientific literature in order to fully understand an area of research and think about how it might develop in the future. The topic will be one that is of interest to your supervisor and, in the initial stages of your dissertation, your supervisor is able to direct you to the most exciting papers. At a later stage, you meet up with your supervisor on a regular basis to discuss your findings and ideas.

Recent student dissertation projects include the following:
- The human red blood cell versus the malaria parasite: a molecular arms race
- Is there life on other planets? What extremophiles can tell us
- Could diet be a cure for autoimmune disease?
- Sleep – a waste of time or an essential behaviour?
VISIT THE UNIVERSITY

Come along for an Open Day or a UCAS Visit Day and see for yourself what it is like to be a student at Kent.

Open Days
Canterbury Open Days are held in the summer and autumn for potential students, and their families and friends, to have a look round the campus. The day includes a wide range of subject displays, demonstrations and informal lectures and seminars. You also get an opportunity to tour the campus with current students to see student accommodation and facilities. For more information, please see www.kent.ac.uk/opendays

UCAS Visit Days
Our UCAS Visit Days are held between January and April each year. Visit Days include a ‘taster’ lecture by one of our academic staff, lunch in one of the colleges followed by a tour of the campus with a student guide, a presentation about the School and the admissions process, and a tour of our teaching and research facilities. During the day, there are ample opportunities to talk to our current students or members of staff to discuss any queries you may have. For more details, please see www.kent.ac.uk/visitdays

Informal visits
You are welcome to visit the campus at any time. We produce a leaflet that can take you on a self-guided tour and you may be able to meet up with an academic member of staff, although we cannot guarantee this. For more details and to download a tour leaflet, go to www.kent.ac.uk/informal

Scholarships and bursaries
For details of scholarships and bursaries at Kent, please see www.kent.ac.uk/ugfunding

On the web
For the latest school information on studying Biology at Kent, please see www.kent.ac.uk/bio

More information
If you would like more information on Kent’s courses, facilities or services, or would like to order another subject leaflet, please contact the Recruitment and Admissions office:
Tel: 01227 827272
Freephone (UK only):
0800 975 3777
Email: information@kent.ac.uk

You can also write to us at:
The Recruitment and Admissions office, The Registry, University of Kent, Canterbury, Kent CT2 7NZ.
Terms and conditions: the University reserves the right to make variations to the content and delivery of courses and other services, or to discontinue courses and other services, if such action is reasonably considered to be necessary. If the University discontinues any course, it will endeavour to provide a suitable alternative. To register for a programme of study, all students must agree to abide by the University Regulations (available online at: www.kent.ac.uk/regulations/).

Data protection: for administrative, academic and health and safety reasons, the University needs to process information about its students. Full registration as a student of the University is subject to your consent to process such information.

Location
Canterbury

Award
BSc (Hons)

Programme type
Full-time

Degree programme
Single honours
- Biology (C103)
- Biology with a Sandwich Year (C105)
- Biology with a Year Abroad (C106)

Offer levels
BBB at A level including A level Biology or Human Biology at Grade B. GCSE Mathematics grade C.

IB Diploma 34 points including Biology 5 at Higher level (HL) or 6 at Standard level (SL) and Mathematics 4 at HL or SL, or IB Diploma with 15 points at Higher level including 5 in HL Biology or 6 in SL Biology, and 4 in Mathematics at HL or SL.

Required subjects
A level Biology or Human Biology at grade B. GCSE Mathematics grade C.

Sandwich Year
Students have the chance to spend a year working in industry between Stages 2 and 3. See p10 and p14 for details.

Year Abroad
Students have the chance to spend a year studying abroad between Stages 2 and 3. See p10 for details.

Professional Recognition
The Biology degree programme is recognised by the Society of Biology (SOB).

Offer levels and entry requirements are subject to change.

For the latest course information, including entry requirements, see: www.kent.ac.uk/ug

Cover image: Flower and bee, courtesy of Wei-Feng Xue
Photo, page 6: Peter Gasson
COME AND VISIT US

We hold Open Days at our Canterbury and Medway campuses.
For more information, see: www.kent.ac.uk/opendays