

## Programme Specification: Undergraduate

### For students starting in Academic Year 2019/20

#### 1. Course Summary

<b>Names of programme and award title(s)</b>	BSc (Hons) Human Biology BSc (Hons) Human Biology with International Year (see Annex for details) BSc (Hons) Human Biology with Work Placement Year (see Annex for details) BSc (Hons) Studies in Human Biology BSc (Hons) Studies in Human Biology with International Year BSc (Hons) Studies in Human Biology with Work Placement Year
<b>Award type</b>	Combined Honours
<b>Mode of study</b>	Full-time
<b>Framework of Higher Education Qualification (FHEQ) level of final award</b>	Level 6
<b>Normal length of the programme</b>	3 years; 4 years with either the International Year or an Applied Life Sciences Placement between years 2 and 3
<b>Maximum period of registration</b>	The normal length as specified above plus 3 years
<b>Location of study</b>	Keele Campus
<b>Accreditation (if applicable)</b>	For students who specialise in Human Biology at Level 6, or combine with Biochemistry, the degree is accredited by the Royal Society of Biology (excluding "Studies in" routes). For further details see the section on Accreditation.
<b>Regulator</b>	Office for Students (OfS)
<b>Tuition Fees</b>	<p><b>UK/EU students:</b></p> <p>Fee for 2019/20 is £9,250*</p> <p><b>International students:</b></p> <p>Fee for 2019/20 is £14,690** (if combined with a non-laboratory-based Principal Subject) or £15,835** (if combined with a laboratory-based Principal Subject)</p> <p>The fee for the international year abroad is calculated at 15% of the standard year fee</p> <p>The fee for the work placement year is calculated at 20% of the standard year fee</p>

**How this information might change:** Please read the important information at <http://www.keele.ac.uk/student-agreement/>. This explains how and why we may need to make changes to the information provided in this document and to help you understand how we will communicate with you if this happens.

\* These fees are regulated by Government. We reserve the right to increase fees in subsequent years of study in response to changes in government policy and/or changes to the law. If permitted by such change in policy or law, we may increase your fees by an inflationary amount or such other measure as required by government policy or the law. Please refer to the accompanying Student Terms & Conditions. Further information on fees can be found at <http://www.keele.ac.uk/studentfunding/tuitionfees/>

\*\* We reserve the right to increase fees in subsequent years of study by an inflationary amount. Please refer to the accompanying Student Terms & Conditions for full details. Further information on fees can be found

## 2. What is a Combined Honours programme?

*NB:* all students who study a science Principal subject are candidates for the degree of Bachelor of Science (with Honours) (BSc Hons) irrespective of their second Principal subject.

Combined Honours degrees are degrees that are taken in two different subjects, resulting in an X and Y degree title. If you are taking a Combined Honours programme, these will be the two subjects you applied for. These are referred to as your Principal Subjects.

In a Combined Honours degree you must take at least 135 credits in each Principal Subject (270 credits in total), accrued over all three levels of study, with at least 45 credits at each level of study (Levels 4, 5 and 6) in each of two Principal Subjects (90 credits per year). The remaining available credits can be filled with modules from these subjects or other subjects entirely.

As a Combined Honours student you can choose to study just one subject in your final year of study, taking a minimum of 90 credits in this subject. This will result in an X with Y degree title.

## 3. Overview of the Programme

This programme is for students who prefer to specialise on topics that are related to Human systems. Human Biology involves the study of the human body and how it is adapted to its environment. This course is designed to equip students with a broadly based understanding of the human body in health and disease. Students will learn about the physiology of the major systems of the body, about the impact of nutrition and environment on health, about the human impacts on our environment and about human development and evolution. A number of modules at levels 5 and 6 address issues that relate to our ever changing lifestyles and have a global perspective, including nutrition, parasitology and advances in scientific research and technologies that have improved our understanding of health and disease.

The multidisciplinary approach to Human Biology is supported by input to the programme from staff with diverse expertise in wide ranging aspects of Human Biology including Medical School staff and research and clinical staff at Keele University, University Hospitals of North Midlands and the Guy Hilton Research Centre (affiliated to Keele University and NHS - a world-leading centre for translational research), physiotherapists, geographers and conservation biologists. This approach has been received enthusiastically by the students especially since this approach provides a context and a broader perspective on the student's academic learning.

Student experience over the three years include practical classes that provide first-hand experience of biology, genetics, human physiology and anatomy, evolution and conservation will equip the student to follow career paths in science, health or industry among others, depending on where their strengths and interests lie. There are a number of opportunities available to students to get work experience and broaden their horizons and build their career prospects, during their studies; including study abroad and placement options. Graduates from this programme have followed diverse careers including postgraduate study, PGCE teacher training, occupational therapy, research assistant and medicine.

Distinctive features of this programme are:

- The specialised Human Biology degree is accredited by the Royal Society of Biology
- The course draws on the resources and expertise of staff from other disciplines including Medicine, Physiotherapy, Physical Sciences and also NHS practitioners and clinical staff based at the Royal Stoke offering an integrated approach to studying Human Biology.
- Students may undertake a Life Sciences placement year between their second and third years at Keele
- Students may undertake an international year between their second and third years at Keele (see Annex A for criteria and details). This option is accredited by the Royal Society of Biology and the Institute of Biomedical Science.
- Students may study abroad at a partner university for one semester in year 2.

## 4. Aims of the programme

The broad aims of the programme are to:

- provide you with knowledge, understanding and skills relevant to human biology;
- produce skilled and motivated graduates who are suitably prepared for further study or for employment within or outside their field;
- cultivate interest in human biology, within a caring and intellectually stimulating environment;
- promote the development of a range of employability skills, for use in all areas where numeracy and an objective, scientific approach to problem-solving are valued, promote the development of independent research skills to enable you to undertake relevant postgraduate study.

## 5. What you will learn

The intended learning outcomes of the programme (what students should know, understand and be able to do at the end of the programme), can be described under the following headings:

- Subject knowledge and understanding

- Subject specific skills
- Key or transferable skills (including employability skills)

### **Subject knowledge and understanding**

Successful students will be able to demonstrate knowledge and understanding of:

- U1: the biology of the human body including the mechanisms of life at molecular, cellular and physiological levels and also at the global community level, and its evolution from the geological past to the present, using a multidisciplinary approach
- U2: the essential facts, major concepts, principles and theories associated with the human body with particular emphasis on understanding human health and disease and the relationship between the human body and the environment
- U3: the basic experimental skills appropriate to the discipline under study that address areas of anatomy, physiology, immunology and genetics
- U4: the approaches to acquiring, interpreting, analysing biological data from a variety of sources, including the use of statistics
- U5: the contribution of research to the development of biological knowledge
- U6: the dynamic, plural and contested nature of the discipline and an awareness of the philosophical and ethical issues involved
- U7: the use of biological terminology, nomenclature and classification systems
- U8: the relevance of biology to practical problems and improving the quality and sustainability of life
- U9: the applicability of the biosciences to the careers to which graduates will be progressing
- U10: be aware of current developments in biochemistry and molecular biology including areas of ethical or public concern
- U11: be able to demonstrate and ability to mine, manipulate and interpret data from small molecule and macromolecular databases

### **Subject specific skills**

Successful students will be able to:

- S1: appreciate the complexity and diversity of life processes through the study of the human body through their molecular, cellular, and physiological processes, their genetics and evolution, and the interrelationships between them and the environment; and recognise and apply subject-specific theories, paradigms, concepts or principles
- S2: analyse, synthesise and evaluate information critically, and use appropriate literature with a full and critical understanding
- S3: use a range of laboratory techniques obtain and integrate several lines of subject-specific evidence to formulate and test hypotheses and ensure competence in experimental skills
- S4: give a clear and accurate account of a subject and engage in debate and dialogue both with specialists and non-specialists, using appropriate scientific language
- S5: to think independently to apply subject knowledge and understanding to address familiar and unfamiliar problems; to plan tasks and solve problems
- S6: formulate a hypothesis and design and employ a variety of methods of study in investigating the hypothesis, acquire and collate scientific data and information and then analyse and report the outcome of the investigations; and construct grammatically correct documents in an appropriate academic style using and referencing relevant ideas and evidence
- S7: recognise philosophical, moral and ethical issues relevant to the subject, and appreciate the need for ethical standards and professional codes of conduct and understand the importance of academic and research integrity
- S8: develop an appreciation of the interdisciplinary nature of science and of the validity of different points of view and take responsibility for their learning and reflect upon that learning

### **Key or transferable skills (including employability skills)**

Successful students will be able to:

- E1: develop and sustain effective approaches to learning and study, including time management, flexibility, creativity and intellectual integrity
- E2: communicate about their subject appropriately to a variety of audiences using a range of formats and approaches, using appropriate scientific language, citing and referencing research critically avoiding issues such as plagiarism
- E3: develop interpersonal skills necessary to work in a team, identifying individual and collective goals and responsibilities and perform accordingly, recognise and respect the views and opinions of other team members; evaluate the performance of others and develop an appreciation of the interdisciplinary nature of science and of the validity of different points of view
- E4: develop an adaptable, flexible, sustainable and effective approach to study and work, including time management, creativity and intellectual integrity
- E5: develop the skills necessary for self-managed and lifelong learning (e.g. working independently, time management, organisational, enterprise and knowledge transfer skills)
- E6: cite and reference work in an appropriate manner, ensuring academic integrity and the avoidance of plagiarism whether intentional or not
- E7: work with others to identify and achieve collaborative goals and responsibilities and perform in a respectful manner that is accepting of the viewpoints and opinions of others and evaluates the roles and development of team members
- E8: identify and work towards targets for personal, academic and career development

## Keele Graduate attributes

Engagement with this programme will enable you to develop your intellectual, personal and professional capabilities. At Keele, we call these our ten Graduate Attributes and they include independent thinking, synthesizing information, creative problem solving, communicating clearly, and appreciating the social, environmental and global implications of your studies and activities. Our educational programme and learning environment is designed to help you to become a well-rounded graduate who is capable of making a positive and valued contribution in a complex and rapidly changing world, whichever spheres of life you engage in after your studies are completed.

Further information about the Keele Graduate Attributes can be found here: <http://www.keele.ac.uk/journey/>

## 6. How is the programme taught?

Learning and teaching methods used on the programme vary according to the module type (i.e. ISP versus taught) and the level of study (i.e. Level 4 (more contact time than level 6)). They include the following:

- **Traditional lectures** where the lecturer provides students with a framework for reading and independent study. Some lecture classes may feature guest speakers from a clinical or research-based area
- **Interactive learning** in large classes where students have the opportunity to work together in smaller groups, interact with the lecturer and reflect on their own learning
- **Practicals** in laboratories are particularly important and involve the study of processes relevant to neuroscience and provide training in a wide range of research techniques
- **Tutorials and seminars** in small groups of students where key issues can be discussed in more depth. Students are expected to play a full part and, occasionally, to lead these discussions. Some tutorials and seminars consist largely of student presentations and some are based on scientific papers studied in advance
- **Independent study** based on directed reading from text books, research papers and research reviews
- **Web-based learning** using the University's virtual learning environment (KLE). The KLE is used to give students easy access to a wide range of resources and research tools, and as a platform for online discussions and quizzes
- For those who choose to take the **experimental project** module in Human Biology in their final year, the opportunity to undertake a piece of independent experimental research supervised and supported by a member of staff

Apart from these formal activities, students are also provided with regular opportunities to talk through particular areas of difficulty, and any special learning needs they may have, with their Personal Tutors or module lecturers on a one-to-one basis.

These learning and teaching methods enable students to achieve the learning outcomes of the programme in a variety of ways. For example:

- Lectures and independent study allow students to gain knowledge and understanding of human biology and its component subjects such as physiology and genetics
- Seminars, tutorials and online discussions provide opportunities for students to ask questions about the subject, and to present their own ideas to members of staff and other students using an appropriate medium of communication
- Interactive lectures, seminars, tutorials and web-based activities encourage students to reflect on their own learning and take responsibility for its development by addressing areas of difficulty, perhaps by discussing them with their fellow students or by getting additional help from a member of staff
- Laboratory practicals allow students insight into the practical aspect of Human Biology and a range of relevant scientific techniques
- Undertaking an experimental project with the support of an experienced researcher allows students to formulate relevant research questions and devise, carry out and analyse experiments to answer them

## 7. Teaching Staff

The teaching staff are mainly from the School of Life Sciences (<https://www.keele.ac.uk/lifesci/people/>). Teaching staff from the School of Allied Health Professions, School of Geography, Geology and the Environment, School of Medicine, Guy Hilton Research Centre and the University Hospital of North Midlands also contribute to the Programme. Most staff are active in bioscience research and qualified to PhD level or equivalent professional level. As part of probationary requirements, new staff must complete a postgraduate certificate in teaching at HE level, which is recognised by SEDA. Several Life Sciences' staff members have been awarded Keele's prestigious Excellence in Teaching and Learning awards and several were awarded a Keele Students' Union Education Award for personal tutoring.

There is a growing culture of higher education research and several members of staff are active in this field, with members of staff having already completed an MA in Teaching and Learning and several others in the process of doing so. In recent years several teaching innovation projects have been run by Life Sciences staff and several new projects have been proposed. Members of the School of Life Sciences hold recognised or accredited teaching qualifications and a number are Fellows or Associates of the Higher Education Academy (HEA) and a number are Senior Fellows of the HEA.

The University will attempt to minimise changes to our core teaching teams, however, delivery of the programme depends on having a sufficient number of staff with the relevant expertise to ensure that the programme is taught to the appropriate academic standard.

Staff turnover, for example where key members of staff leave, fall ill or go on research leave, may result in changes to the programme's

content. The University will endeavour to ensure that any impact on students is limited if such changes occur.

## 8. What is the structure of the Programme?

The academic year runs from September to June and is divided into two semesters. The number of weeks of teaching will vary from programme to programme, but you can generally expect to attend scheduled teaching sessions between the end of September and mid-December, and from mid-January to the end of April. Our degree courses are organised into modules. Each module is usually a self-contained unit of study and each is usually assessed separately with the award of credits on the basis of 1 credit = 10 hours of student effort. An outline of the structure of the programme is provided in the tables below.

There are three types of module delivered as part of your programme. They are:

- Compulsory modules - a module that you are required to study on this course;
- Optional modules - these allow you some limited choice of what to study from a list of modules;
- Elective modules - a free choice of modules that count towards the overall credit requirement but not the number of subject-related credits.

A summary of the total credit requirements per year is as follows, with a minimum of 90 subject credits (compulsory plus optional) required for each year across both of your Principal Subjects. This document has information about *Human Biology* modules only; please also see the document for your other subject.

For further information on the content of modules currently offered, including the list of elective modules, please visit:

<https://www.keele.ac.uk/recordsandexams/modulecatalogue/>

Year	Compulsory	Optional		Electives	
		Min	Max	Min	Max
Level 4	60	0	0	0	0
Level 5	30	30	30	0	0
Level 6	0	60	75	0	0

- Variations in Year 3:

Students combining with Biochemistry must select a 30 credit Life Sciences Double Experimental Project or Double Applied Life Sciences Placement.

There is the option to choose to specialise in one of your subjects, taking a minimum of 90 credits in this subject rather than taking modules from both subjects.

Students who specialise in Human Biology must select a 30 credit Life Sciences Double Experimental Project or Double Applied Life Sciences Placement.

### Module Lists

#### Level 4

Compulsory modules	Module Code	Credits	Period
Cellular Genetics and Evolution	LSC-10072	30	Semester 1-2
Physiology and Anatomy	LSC-10074	30	Semester 1-2

#### Level 5

Compulsory modules	Module Code	Credits	Period
Human Genetics	LSC-20050	15	Semester 1
Research and Analytical Skills	LSC-20056	15	Semester 2

Optional modules	Module Code	Credits	Period
Human Impact on the Environment, scientific perspectives	ESC-20017	15	Semester 1
Molecular, Cellular and Structural Immunology	LSC-20015	15	Semester 1
Life Sciences Study Abroad III	LSC-20065	15	Semester 1
Life Sciences Study Abroad IV	LSC-20066	15	Semester 1
Microbes, Viruses and Parasites	LSC-20073	15	Semester 1
Neurodevelopment	LSC-20077	15	Semester 1
Nutrition and Energy Balance	LSC-20052	15	Semester 2
Life Sciences Study Abroad VII	LSC-20069	15	Semester 2
Life Sciences Study Abroad VIII	LSC-20070	15	Semester 2
Learning & Memory	LSC-20076	15	Semester 2
Health and the Environment	PTY-20020	15	Semester 2

### Level 5 Module Rules

Students choose 2 modules from the optional modules listed above.

### Level 6

Optional modules	Module Code	Credits	Period
Applied Life Sciences Placement - ISP	LSC-30019	15	Semester 1
Advances in Medicine	LSC-30028	15	Semester 1
Human Parasitology	LSC-30036	15	Semester 1
Double Applied Life Sciences Placement - ISP	LSC-30038	30	Semester 1
Conservation Biology	LSC-30043	15	Semester 1
Behavioural Neuroscience	LSC-30052	15	Semester 1
Brain Disease	LSC-30063	15	Semester 1
Tropical Biology Field Course	LSC-30066	15	Semester 1
Life Sciences Double Experimental Project (with research skills assessment)	LSC-30045	30	Semester 1-2
Life Sciences Single Experimental Project (with research skills assessment) - ISP	LSC-30048	15	Semester 1-2
Life Sciences Dissertation	LSC-30050	15	Semester 1-2
Biology of Disease - ISP	LSC-30015	15	Semester 2
Human Evolution	LSC-30030	15	Semester 2
Regeneration and Repair in the Nervous System	LSC-30039	15	Semester 2
Communication Skills for Biologists	LSC-30059	15	Semester 2
Cancer Biology	LSC-30061	15	Semester 2

If you choose to specialise in this subject in your final year you will study the following modules:

Optional modules	Module Code	Credits	Period
Advances in Medicine	LSC-30028	15	Semester 1
Human Parasitology	LSC-30036	15	Semester 1
Double Applied Life Sciences Placement - ISP	LSC-30038	30	Semester 1
Conservation Biology	LSC-30043	15	Semester 1
Behavioural Neuroscience	LSC-30052	15	Semester 1
Brain Disease	LSC-30063	15	Semester 1
Tropical Biology Field Course	LSC-30066	15	Semester 1
Life Sciences Double Experimental Project (with research skills assessment)	LSC-30045	30	Semester 1-2
Biology of Disease - ISP	LSC-30015	15	Semester 2
Human Evolution	LSC-30030	15	Semester 2
Regeneration and Repair in the Nervous System	LSC-30039	15	Semester 2
Communication Skills for Biologists	LSC-30059	15	Semester 2
Cancer Biology	LSC-30061	15	Semester 2

### Level 6 Module Rules

1. LSC-30038: the Double Applied Life Sciences Placement modules may replace Life Sciences Experimental Project (with research skills assessment) modules if the nature of the placement is deemed suitable and the work carried out meets the criteria of the research project module.
2. LSC-30038/LSC-30045: if a student fails the Life Sciences double experimental project module (or the alternative Double Applied Life Science placement module) but has it condoned, then they will not be eligible for an RSB accredited degree, but shall instead be eligible for the award BSc Studies in Human Biology.
3. LSC-30038/LSC-30045: students taking Human Biology and Biochemistry must choose one of these modules.
4. LSC-30048/LSC-30050/LSC-30019: students taking Human Biology and a subject outside of the School of Life Sciences must choose one of these modules.
5. LSC-30052: prerequisite: Learning and Memory.
6. LSC-30036: prerequisite: Molecular, Cellular and Structural Immunology or Microbes, Viruses and Parasites.
7. LSC-30043: prerequisite: Human Impacts on the Environment, scientific perspectives.
8. LSC-30039: prerequisite: Neurodevelopment.
9. All option module combinations are subject to timetabling.

### Learning Outcomes

The table below sets out what students learn in the programme and the modules in which that learning takes place. Details of how learning outcomes are assessed through these modules can be found in module specifications.

#### Level 4

In Year 1 (Level 4) and Year 2 (Level 5) these learning outcomes are achieved in the compulsory modules which all students are required to take. Some of these outcomes may also be achieved or reinforced in elective modules together with other outcomes not stated here. In Year 3 (Level 6) the stated outcomes are achieved by taking any of the modules offered in each semester.

<b>Subject Knowledge and Understanding</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
U1: the biology of the human body including the mechanisms of life at molecular, cellular and physiological levels and also at the global community level, and its evolution from the geological past to the present, using a multidisciplinary approach	Cellular Genetics and Evolution - LSC-10072 Physiology and Anatomy - LSC-10074
U2: the essential facts, major concepts, principles and theories associated with the human body with particular emphasis on understanding human health and disease and the relationship between the human body and the environment	Cellular Genetics and Evolution - LSC-10072 Physiology and Anatomy - LSC-10074
U3: the basic experimental skills appropriate to the discipline under study that address areas of anatomy, physiology, immunology and genetics	Cellular Genetics and Evolution - LSC-10072 Physiology and Anatomy - LSC-10074
U4: the approaches to acquiring, interpreting, analysing biological data from a variety of sources, including the use of statistics	Cellular Genetics and Evolution - LSC-10072 Physiology and Anatomy - LSC-10074
U5: the contribution of research to the development of biological knowledge	Physiology and Anatomy - LSC-10074 Cellular Genetics and Evolution - LSC-10072
U6: the dynamic, plural and contested nature of the discipline and an awareness of the philosophical and ethical issues involved	Physiology and Anatomy - LSC-10074 Cellular Genetics and Evolution - LSC-10072
U7: the use of biological terminology, nomenclature and classification systems	Cellular Genetics and Evolution - LSC-10072 Physiology and Anatomy - LSC-10074
U8: the relevance of biology to practical problems and improving the quality and sustainability of life	Physiology and Anatomy - LSC-10074 Cellular Genetics and Evolution - LSC-10072
U9: the applicability of the biosciences to the careers to which graduates will be progressing	Physiology and Anatomy - LSC-10074 Cellular Genetics and Evolution - LSC-10072
U10: be aware of current developments in biochemistry and molecular biology including areas of ethical or public concern	Cellular Genetics and Evolution - LSC-10072 Physiology and Anatomy - LSC-10074
U11: be able to demonstrate and ability to mine, manipulate and interpret data from small molecule and macromolecular databases	Cellular Genetics and Evolution - LSC-10072 Physiology and Anatomy - LSC-10074

<b>Subject Specific Skills</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
S1: appreciate the complexity and diversity of life processes through the study of the human body through their molecular, cellular, and physiological processes, their genetics and evolution, and the interrelationships between them and the environment; and recognise and apply subject-specific theories, paradigms, concepts or principles	Cellular Genetics and Evolution - LSC-10072 Physiology and Anatomy - LSC-10074
S2: analyse, synthesise and evaluate information critically, and use appropriate literature with a full and critical understanding	Cellular Genetics and Evolution - LSC-10072 Physiology and Anatomy - LSC-10074
S3: use a range of laboratory techniques obtain and integrate several lines of subject-specific evidence to formulate and test hypotheses and ensure competence in experimental skills	Physiology and Anatomy - LSC-10074 Cellular Genetics and Evolution - LSC-10072
S4: give a clear and accurate account of a subject and engage in debate and dialogue both with specialists and non-specialists, using appropriate scientific language	Cellular Genetics and Evolution - LSC-10072 Physiology and Anatomy - LSC-10074
S5: to think independently to apply subject knowledge and understanding to address familiar and unfamiliar problems; to plan tasks and solve problems	Cellular Genetics and Evolution - LSC-10072 Physiology and Anatomy - LSC-10074
S6: formulate a hypothesis and design and employ a variety of methods of study in investigating the hypothesis, acquire and collate scientific data and information and then analyse and report the outcome of the investigations; and construct grammatically correct documents in an appropriate academic style using and referencing relevant ideas and evidence	Cellular Genetics and Evolution - LSC-10072 Physiology and Anatomy - LSC-10074
S7: recognise philosophical, moral and ethical issues relevant to the subject, and appreciate the need for ethical standards and professional codes of conduct and understand the importance of academic and research integrity	Physiology and Anatomy - LSC-10074 Cellular Genetics and Evolution - LSC-10072
S8: develop an appreciation of the interdisciplinary nature of science and of the validity of different points of view and take responsibility for their learning and reflect upon that learning	Physiology and Anatomy - LSC-10074 Cellular Genetics and Evolution - LSC-10072

<b>Key or Transferable Skills (graduate attributes)</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
E1: develop and sustain effective approaches to learning and study, including time management, flexibility, creativity and intellectual integrity	Cellular Genetics and Evolution - LSC-10072 Physiology and Anatomy - LSC-10074
E2: communicate about their subject appropriately to a variety of audiences using a range of formats and approaches, using appropriate scientific language, citing and referencing research critically avoiding issues such as plagiarism	Cellular Genetics and Evolution - LSC-10072 Physiology and Anatomy - LSC-10074
E3: develop interpersonal skills necessary to work in a team, identifying individual and collective goals and responsibilities and perform accordingly, recognise and respect the views and opinions of other team members; evaluate the performance of others and develop an appreciation of the interdisciplinary nature of science and of the validity of different points of view	Physiology and Anatomy - LSC-10074 Cellular Genetics and Evolution - LSC-10072
E4: develop an adaptable, flexible, sustainable and effective approach to study and work, including time management, creativity and intellectual integrity	Physiology and Anatomy - LSC-10074 Cellular Genetics and Evolution - LSC-10072
E5: develop the skills necessary for self-managed and lifelong learning (e.g. working independently, time management, organisational, enterprise and knowledge transfer skills)	Physiology and Anatomy - LSC-10074 Cellular Genetics and Evolution - LSC-10072
E6: cite and reference work in an appropriate manner, ensuring academic integrity and the avoidance of plagiarism whether intentional or not	Cellular Genetics and Evolution - LSC-10072 Physiology and Anatomy - LSC-10074
E7: work with others to identify and achieve collaborative goals and responsibilities and perform in a respectful manner that is accepting of the viewpoints and opinions of others and evaluates the roles and development of team members	Physiology and Anatomy - LSC-10074 Cellular Genetics and Evolution - LSC-10072
E8: identify and work towards targets for personal, academic and career development	Cellular Genetics and Evolution - LSC-10072 Physiology and Anatomy - LSC-10074

## **Level 5**

<b>Subject Knowledge and Understanding</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
U1: the biology of the human body including the mechanisms of life at molecular, cellular and physiological levels and also at the global community level, and its evolution from the geological past to the present, using a multidisciplinary approach	Neurodevelopment Human Impacts on the Environment, scientific perspectives Molecular, Cellular and Structural Immunology Microbes, Viruses and Parasites Nutrition and Energy Balance Health and the Environment Learning and Memory Life Sciences Study Abroad Human Genetics Research and Analytical Skills

<b>Subject Knowledge and Understanding</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
U2: the essential facts, major concepts, principles and theories associated with the human body with particular emphasis on understanding human health and disease and the relationship between the human body and the environment	Neurodevelopment Human Impacts on the Environment, scientific perspectives Molecular, Cellular and Structural Immunology Microbes, Viruses and Parasites Nutrition and Energy Balance Health and the Environment Learning and Memory Life Sciences Study Abroad Human Genetics Research and Analytical Skills
U3: the basic experimental skills appropriate to the discipline under study that address areas of anatomy, physiology, immunology and genetics	Neurodevelopment - LSC-20077 Nutrition and Energy Balance - LSC-20052 Molecular, Cellular and Structural Immunology - LSC-20015
U4: the approaches to acquiring, interpreting, analysing biological data from a variety of sources, including the use of statistics	Research and Analytical Skills - LSC-20056 Nutrition and Energy Balance - LSC-20052 Neurodevelopment - LSC-20077 Molecular, Cellular and Structural Immunology - LSC-20015
U5: the contribution of research to the development of biological knowledge	Neurodevelopment Human Impacts on the Environment, scientific perspectives Molecular, Cellular and Structural Immunology Microbes, Viruses and Parasites Nutrition and Energy Balance Health and the Environment Learning and Memory Life Sciences Study Abroad Human Genetics Research and Analytical Skills
U6: the dynamic, plural and contested nature of the discipline and an awareness of the philosophical and ethical issues involved	Neurodevelopment Human Impacts on the Environment, scientific perspectives Molecular, Cellular and Structural Immunology Microbes, Viruses and Parasites Nutrition and Energy Balance Health and the Environment Learning and Memory Life Sciences Study Abroad Human Genetics Research and Analytical Skills
U7: the use of biological terminology, nomenclature and classification systems	Neurodevelopment Human Impacts on the Environment, scientific perspectives Molecular, Cellular and Structural Immunology Microbes, Viruses and Parasites Nutrition and Energy Balance Health and the Environment Learning and Memory Life Sciences Study Abroad Human Genetics Research and Analytical Skills
U8: the relevance of biology to practical problems and improving the quality and sustainability of life	Neurodevelopment Human Impacts on the Environment, scientific perspectives Molecular, Cellular and Structural Immunology Microbes, Viruses and Parasites Nutrition and Energy Balance Health and the Environment Learning and Memory Life Sciences Study Abroad Human Genetics Research and Analytical Skills

<b>Subject Knowledge and Understanding</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
U9: the applicability of the biosciences to the careers to which graduates will be progressing	Neurodevelopment Human Impacts on the Environment, scientific perspectives Molecular, Cellular and Structural Immunology Microbes, Viruses and Parasites Nutrition and Energy Balance Health and the Environment Learning and Memory Life Sciences Study Abroad Human Genetics Research and Analytical Skills
U10: be aware of current developments in biochemistry and molecular biology including areas of ethical or public concern	Neurodevelopment Human Impacts on the Environment, scientific perspectives Molecular, Cellular and Structural Immunology Microbes, Viruses and Parasites Nutrition and Energy Balance Health and the Environment Learning and Memory Life Sciences Study Abroad Human Genetics Research and Analytical Skills
U11: be able to demonstrate and ability to mine, manipulate and interpret data from small molecule and macromolecular databases	Neurodevelopment Human Impacts on the Environment, scientific perspectives Molecular, Cellular and Structural Immunology Microbes, Viruses and Parasites Nutrition and Energy Balance Health and the Environment Learning and Memory Life Sciences Study Abroad Human Genetics Research and Analytical Skills

<b>Subject Specific Skills</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
S1: appreciate the complexity and diversity of life processes through the study of the human body through their molecular, cellular, and physiological processes, their genetics and evolution, and the interrelationships between them and the environment; and recognise and apply subject-specific theories, paradigms, concepts or principles	Neurodevelopment Human Impacts on the Environment, scientific perspectives Molecular, Cellular and Structural Immunology Microbes, Viruses and Parasites Nutrition and Energy Balance Health and the Environment Learning and Memory Life Sciences Study Abroad Human Genetics Research and Analytical Skills
S2: analyse, synthesise and evaluate information critically, and use appropriate literature with a full and critical understanding	Neurodevelopment Human Impacts on the Environment, scientific perspectives Molecular, Cellular and Structural Immunology Microbes, Viruses and Parasites Nutrition and Energy Balance Health and the Environment Learning and Memory Life Sciences Study Abroad Human Genetics Research and Analytical Skills
S3: use a range of laboratory techniques obtain and integrate several lines of subject-specific evidence to formulate and test hypotheses and ensure competence in experimental skills	Nutrition and Energy Balance - LSC-20052 Neurodevelopment - LSC-20077 Molecular, Cellular and Structural Immunology - LSC-20015

<b>Subject Specific Skills</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
S4: give a clear and accurate account of a subject and engage in debate and dialogue both with specialists and non-specialists, using appropriate scientific language	Research and Analytical Skills - LSC-20056
S5: to think independently to apply subject knowledge and understanding to address familiar and unfamiliar problems; to plan tasks and solve problems	Molecular, Cellular and Structural Immunology - LSC-20015 Nutrition and Energy Balance - LSC-20052 Neurodevelopment - LSC-20077
S6: formulate a hypothesis and design and employ a variety of methods of study in investigating the hypothesis, acquire and collate scientific data and information and then analyse and report the outcome of the investigations; and construct grammatically correct documents in an appropriate academic style using and referencing relevant ideas and evidence	Research and Analytical Skills - LSC-20056 Health and the Environment - PTY-20020
S7: recognise philosophical, moral and ethical issues relevant to the subject, and appreciate the need for ethical standards and professional codes of conduct and understand the importance of academic and research integrity	Neurodevelopment Human Impacts on the Environment, scientific perspectives Molecular, Cellular and Structural Immunology Microbes, Viruses and Parasites Nutrition and Energy Balance Health and the Environment Learning and Memory Life Sciences Study Abroad Human Genetics Research and Analytical Skills
S8: develop an appreciation of the interdisciplinary nature of science and of the validity of different points of view and take responsibility for their learning and reflect upon that learning	Neurodevelopment Human Impacts on the Environment, scientific perspectives Molecular, Cellular and Structural Immunology Microbes, Viruses and Parasites Nutrition and Energy Balance Health and the Environment Learning and Memory Life Sciences Study Abroad Human Genetics Research and Analytical Skills

<b>Key or Transferable Skills (graduate attributes)</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
E1: develop and sustain effective approaches to learning and study, including time management, flexibility, creativity and intellectual integrity	Neurodevelopment Human Impacts on the Environment, scientific perspectives Molecular, Cellular and Structural Immunology Microbes, Viruses and Parasites Nutrition and Energy Balance Health and the Environment Learning and Memory Life Sciences Study Abroad Human Genetics Research and Analytical Skills
E2: communicate about their subject appropriately to a variety of audiences using a range of formats and approaches, using appropriate scientific language, citing and referencing research critically avoiding issues such as plagiarism	Health and the Environment - PTY-20020 Research and Analytical Skills - LSC-20056 Microbes, Viruses and Parasites - LSC-20073
E3: develop interpersonal skills necessary to work in a team, identifying individual and collective goals and responsibilities and perform accordingly, recognise and respect the views and opinions of other team members; evaluate the performance of others and develop an appreciation of the interdisciplinary nature of science and of the validity of different points of view	Research and Analytical Skills Health and the Environment Microbes, Viruses and Parasites Neurodevelopment Molecular, Cellular and Structural Immunology Nutrition and Energy Balance

<b>Key or Transferable Skills (graduate attributes)</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
E4: develop an adaptable, flexible, sustainable and effective approach to study and work, including time management, creativity and intellectual integrity	Neurodevelopment Human Impacts on the Environment, scientific perspectives Molecular, Cellular and Structural Immunology Microbes, Viruses and Parasites Nutrition and Energy Balance Health and the Environment Learning and Memory Life Sciences Study Abroad Human Genetics Research and Analytical Skills
E5: develop the skills necessary for self-managed and lifelong learning (e.g. working independently, time management, organisational, enterprise and knowledge transfer skills)	Neurodevelopment Human Impacts on the Environment, scientific perspectives Molecular, Cellular and Structural Immunology Microbes, Viruses and Parasites Nutrition and Energy Balance Health and the Environment Learning and Memory Life Sciences Study Abroad Human Genetics Research and Analytical Skills
E6: cite and reference work in an appropriate manner, ensuring academic integrity and the avoidance of plagiarism whether intentional or not	Neurodevelopment Human Impacts on the Environment, scientific perspectives Molecular, Cellular and Structural Immunology Microbes, Viruses and Parasites Nutrition and Energy Balance Health and the Environment Learning and Memory Life Sciences Study Abroad Human Genetics Research and Analytical Skills
E7: work with others to identify and achieve collaborative goals and responsibilities and perform in a respectful manner that is accepting of the viewpoints and opinions of others and evaluates the roles and development of team members	Research and Analytical Skills Health and the Environment Microbes, Viruses and Parasites Neurodevelopment Molecular, Cellular and Structural Immunology Nutrition and Energy Balance
E8: identify and work towards targets for personal, academic and career development	Neurodevelopment Human Impacts on the Environment, scientific perspectives Molecular, Cellular and Structural Immunology Microbes, Viruses and Parasites Nutrition and Energy Balance Health and the Environment Learning and Memory Life Sciences Study Abroad Human Genetics Research and Analytical Skills

## **Level 6**

<b>Subject Knowledge and Understanding</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>

<b>Subject Knowledge and Understanding</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
U1: the biology of the human body including the mechanisms of life at molecular, cellular and physiological levels and also at the global community level, and its evolution from the geological past to the present, using a multidisciplinary approach	Behavioural Neuroscience Human Parasitology Conservation Biology Advances in Medicine Brain Disease Human Evolution Biology of Disease Regeneration & Repair in the Nervous System Biomedical Engineering Life Sciences Double Experimental Project (with research skills assessment) - ISP (Double) Life Sciences Single Experimental Project (with research skills assessment) - ISP (single) Life Sciences Dissertation - ISP (single) Applied Life Sciences Placement - ISP (single) Double Applied Life Sciences Placement - ISP (Double)
U2: the essential facts, major concepts, principles and theories associated with the human body with particular emphasis on understanding human health and disease and the relationship between the human body and the environment	Behavioural Neuroscience Human Parasitology Conservation Biology Advances in Medicine Brain Disease Human Evolution Biology of Disease Regeneration & Repair in the Nervous System Biomedical Engineering Life Sciences Double Experimental Project (with research skills assessment) - ISP (Double) Life Sciences Single Experimental Project (with research skills assessment) - ISP (single) Life Sciences Dissertation - ISP (single) Applied Life Sciences Placement - ISP (single) Double Applied Life Sciences Placement - ISP (Double)
U3: the basic experimental skills appropriate to the discipline under study that address areas of anatomy, physiology, immunology and genetics	Life Sciences Double Experimental Project (with research skills assessment) - ISP (Double) Life Sciences Single Experimental Project (with research skills assessment) - ISP (single) Applied Life Sciences Placement - ISP (single)
U4: the approaches to acquiring, interpreting, analysing biological data from a variety of sources, including the use of statistics	Tropical Biology Field Course - LSC-30066 Life Sciences Double Experimental Project (with research skills assessment) - ISP (Double) Life Sciences Single Experimental Project (with research skills assessment) - ISP (single) Applied Life Sciences Placement - ISP (single) Communication Skills for Biologists
U5: the contribution of research to the development of biological knowledge	All modules
U6: the dynamic, plural and contested nature of the discipline and an awareness of the philosophical and ethical issues involved	Life Sciences Double Experimental Project (with research skills assessment) - ISP (Double) Life Sciences Single Experimental Project (with research skills assessment) - ISP (single) Double Applied Life Sciences Placement - ISP (Double)
U7: the use of biological terminology, nomenclature and classification systems	All modules

<b>Subject Knowledge and Understanding</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
U8: the relevance of biology to practical problems and improving the quality and sustainability of life	Tropical Biology Field Course - LSC-30066 Life Sciences Double Experimental Project (with research skills assessment) - ISP (Double) Life Sciences Single Experimental Project (with research skills assessment) - ISP (single) Life Sciences Dissertation - ISP (single) Applied Life Sciences Placement - ISP (single) Communication Skills for Biologists
U9: the applicability of the biosciences to the careers to which graduates will be progressing	All modules
U10: be aware of current developments in biochemistry and molecular biology including areas of ethical or public concern	All modules
U11: be able to demonstrate and ability to mine, manipulate and interpret data from small molecule and macromolecular databases	All modules

<b>Subject Specific Skills</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
S1: appreciate the complexity and diversity of life processes through the study of the human body through their molecular, cellular, and physiological processes, their genetics and evolution, and the interrelationships between them and the environment; and recognise and apply subject-specific theories, paradigms, concepts or principles	All modules
S2: analyse, synthesise and evaluate information critically, and use appropriate literature with a full and critical understanding	All modules
S3: use a range of laboratory techniques obtain and integrate several lines of subject-specific evidence to formulate and test hypotheses and ensure competence in experimental skills	All modules
S4: give a clear and accurate account of a subject and engage in debate and dialogue both with specialists and non-specialists, using appropriate scientific language	All modules
S5: to think independently to apply subject knowledge and understanding to address familiar and unfamiliar problems; to plan tasks and solve problems	Tropical Biology Field Course - LSC-30066 Life Sciences Double Experimental Project (with research skills assessment) - ISP (Double) Life Sciences Single Experimental Project (with research skills assessment) - ISP (single) Double Applied Life Sciences Placement - ISP (Double) Communication Skills for Biologists
S6: formulate a hypothesis and design and employ a variety of methods of study in investigating the hypothesis, acquire and collate scientific data and information and then analyse and report the outcome of the investigations; and construct grammatically correct documents in an appropriate academic style using and referencing relevant ideas and evidence	Life Sciences Double Experimental Project (with research skills assessment) - ISP (Double) Life Sciences Single Experimental Project (with research skills assessment) - ISP (single) Double Applied Life Sciences Placement - ISP (Double)
S7: recognise philosophical, moral and ethical issues relevant to the subject, and appreciate the need for ethical standards and professional codes of conduct and understand the importance of academic and research integrity	Life Sciences Double Experimental Project (with research skills assessment) - ISP (Double) Life Sciences Single Experimental Project (with research skills assessment) - ISP (single) Double Applied Life Sciences Placement - ISP (Double)
S8: develop an appreciation of the interdisciplinary nature of science and of the validity of different points of view and take responsibility for their learning and reflect upon that learning	All modules

<b>Key or Transferable Skills (graduate attributes)</b>	
<b>Learning Outcome</b>	<b>Module in which this is delivered</b>
E1: develop and sustain effective approaches to learning and study, including time management, flexibility, creativity and intellectual integrity	All modules
E2: communicate about their subject appropriately to a variety of audiences using a range of formats and approaches, using appropriate scientific language, citing and referencing research critically avoiding issues such as plagiarism	All modules
E3: develop interpersonal skills necessary to work in a team, identifying individual and collective goals and responsibilities and perform accordingly, recognise and respect the views and opinions of other team members; evaluate the performance of others and develop an appreciation of the interdisciplinary nature of science and of the validity of different points of view	Life Sciences Double Experimental Project (with research skills assessment) - ISP (Double) Life Sciences Single Experimental Project (with research skills assessment) - ISP (single) Double Applied Life Sciences Placement - ISP (Double)
E4: develop an adaptable, flexible, sustainable and effective approach to study and work, including time management, creativity and intellectual integrity	All modules
E5: develop the skills necessary for self-managed and lifelong learning (e.g. working independently, time management, organisational, enterprise and knowledge transfer skills)	All modules
E6: cite and reference work in an appropriate manner, ensuring academic integrity and the avoidance of plagiarism whether intentional or not	All modules
E7: work with others to identify and achieve collaborative goals and responsibilities and perform in a respectful manner that is accepting of the viewpoints and opinions of others and evaluates the roles and development of team members	All modules
E8: identify and work towards targets for personal, academic and career development	All modules

## 9. Final and intermediate awards

Credits required for each level of academic award are as follows:

<b>Honours Degree</b>	360 credits	You will require at least 120 credits at levels 4, 5 and 6  You must accumulate a minimum of 135 credits in each Principal Subject (270 credits in total), with at least 45 credits at each level of study (Levels 4, 5 and 6) in each of two Principal Subjects (90 credits per year). Your degree title will be 'subject X and subject Y'.  If you choose to study one Principal subject in your final year of study a minimum of 90 credits in that subject is required. Your degree title will be 'subject X with subject Y'.
<b>Diploma in Higher Education</b>	240 credits	You will require at least 120 credits at level 4 or higher and at least 120 credits at level 5 or higher
<b>Certificate in Higher Education</b>	120 credits	You will require at least 120 credits at level 4 or higher

**International Year option:** in addition to the above students must pass a module covering the international year in order to graduate

with a named degree including the 'international year' wording. Students who do not complete, or fail the international year, will be transferred to the three-year version of the programme.

**Work Placement Year option:** in addition to the above students must pass a non-credit bearing module covering the work placement year in order to graduate with a named degree including the 'with Work Placement Year' wording. Students who do not complete, or fail the work placement year, will be transferred to the three-year version of the programme.

## 10. How is the Programme Assessed?

The wide variety of assessment methods used on this programme at Keele reflects the broad range of knowledge and skills that are developed as you progress through the degree programme. Teaching staff pay particular attention to specifying clear assessment criteria and providing timely, regular and constructive feedback that helps to clarify things you did not understand and helps you to improve your performance. The following list is representative of the variety of assessment methods used on your programme:

- **Unseen examinations** in different formats test students' knowledge and understanding of human biology. Examinations may consist of essay, short answer and/or multiple choice questions
- **Essays**, including those based on case study material, also test the quality and application of subject knowledge. In addition they allow students to demonstrate their ability to carry out basic bibliographic research and to communicate their ideas effectively in writing in an appropriate scholarly style using the Harvard system of referencing
- **Class tests** taken either conventionally or online via the Keele Learning Environment (KLE) assess students' subject knowledge and their ability to apply it in a more structured and focused way
- **Group activities** might include working on a collaborate project such as compiling a book chapter
- **Dissertations** are critical reviews of other scholars' work and test students' ability to identify and summarise the key points of a text and to evaluate the quality of arguments and the evidence used to support them. In the case of work based on empirical research, reviews also assess students' knowledge of research methodologies and their ability to make critical judgements about the appropriateness of different strategies for collecting and analysing data
- **Experimental projects** test students' knowledge of research methodologies and their ability to carry them out. They also enable students to demonstrate their ability to formulate research questions, design experiments, carry them out and analyse the results
- **Laboratory reports** are formal summaries of work carried out in the laboratory, presenting analysed data and conclusions. They test a range of practical laboratory skills and the ability to collect analyse and present data
- **Oral presentations** assess students' subject knowledge and understanding. They also test their ability to work effectively as members of a team, to communicate what they know orally and visually, and to reflect on these processes as part of their own personal development

Marks are awarded for summative assessments designed to assess your achievement of learning outcomes. You will also be assessed formatively to enable you to monitor your own progress and to assist staff in identifying and addressing any specific learning needs. Feedback, including guidance on how you can improve the quality of your work, is also provided on all summative assessments within three working weeks of submission, unless there are compelling circumstances that make this impossible, and more informally in the course of tutorial and seminar discussions.

## 11. Contact Time and Expected Workload

This contact time measure is intended to provide you with an indication of the type of activity you are likely to undertake during this programme. The data is compiled based on module choices and learning patterns of students on similar programmes in previous years. Every effort is made to ensure this data is a realistic representation of what you are likely to experience, but changes to programmes, teaching methods and assessment methods mean this data is representative and not specific.

Undergraduate courses at Keele contain an element of module choice; therefore, individual students will experience a different mix of contact time and assessment types dependent upon their own individual choice of modules. The figures below are an example of activities that a student may expect on your chosen course by year stage of study. Contact time includes scheduled activities such as: lecture, seminar, tutorial, project supervision, demonstration, practical classes and labs, supervised time in labs/workshop, fieldwork and external visits. The figures are based on 1,200 hours of student effort each year for full-time students.

### Activity

	Scheduled learning and teaching activities	Guided independent Study	Placements
Year 1 (Level 4)	27%	73%	0%
Year 2 (Level 5)	25%	75%	0%
Year 3 (Level 6)	12%	88%	0%

## 12. Accreditation

Students who specialise in Human Biology at level 6, or who combine with Biochemistry, will be eligible for an award title that is accredited by the Royal Society of Biology.

Students should note that to be awarded Royal Society of Biology accreditation they must achieve a minimum standard of 40% in the Life Sciences Double Experimental Project (with research skills assessment), or equivalent placement module. Students that condone this module may still be eligible for the award Studies in Human Biology.

### 13. University Regulations

The University Regulations form the framework for learning, teaching and assessment and other aspects of the student experience. Further information about the University Regulations can be found at: <http://www.keele.ac.uk/student-agreement/>

If this programme has any exemptions, variations or additions to the University Regulations these will be detailed in an Annex at the end of this document titled 'Programme-specific regulations'.

A student who has completed a semester abroad will not normally be eligible to transfer onto the International Year option. Where a programme has an "International Year" option and a "Placement Year" option, students may elect to follow either the International Year or Placement Year, but not both.

### 14. What are the typical admission requirements for the Programme?

See the relevant course page on the website for the admission requirements relevant to this programme: <https://www.keele.ac.uk/study/>

Applicants who are not currently undertaking any formal study or who have been out of formal education for more than 3 years and are not qualified to A-level or BTEC standard may be offered entry to the University's Foundation Year Programme.

Applicants for whom English is not a first language must provide evidence of a recognised qualification in English language. The minimum score for entry to the Programme is Academic IELTS 6.0 or equivalent.

Please note: All non-native English speaking students are required to undertake a diagnostic English language assessment on arrival at Keele, to determine whether English language support may help them succeed with their studies. An English language module may be compulsory for some students during their first year at Keele.

Recognition of Prior Learning (RPL) is considered on a case-by-case basis and those interested should contact the Programme Director. The University's guidelines on this can be found here: <http://www.keele.ac.uk/ga/accreditationofpriorlearning/>

### 15. How are students supported on the programme?

- Module tutors are responsible for providing support for learning on the modules. They also give individual feedback on in-course assessments and more general feedback on examinations.
- Tutors and demonstrators provide help and advice to students in laboratory sessions.
- Every student is allocated to a personal tutor who is responsible for reviewing and advising on students' academic progress in Human Biology and on their other Principal Programme.
- Personal tutors also act as a first point of contact for students on non-academic issues which may affect their learning and can refer students on to a range of specialist health, welfare and financial services co-ordinated by the University's Student Services.

All members of teaching staff on the Human Biology Principal Programme are available to see students during office hours, if available, and by appointment.

### 16. Learning Resources

Human Biology is taught in modern teaching rooms across the University, almost all of which are equipped with computers, Internet access and electronic whiteboards or projection equipment. Rooms may be arranged either in traditional lecture format or more informally to allow students to work together in small groups.

Practical sessions are held in dedicated teaching laboratories within the School of Life Sciences. These were completely refitted in 2006 at a cost of £3.3 million and have places for a total of 210 students. A new extension to the Huxley Building, with an investment of £11 million, will provide additional teaching laboratory space and is expected to be in use from the start of the 2017/18 academic year.

The learning resources available to students on the Programme include:

- The extensive collection of books and journals relevant to undergraduate study held in the University Library. Much of this material is also accessible online to Keele students from anywhere in the world with a University username and password.
- A smaller collection of biological publications and materials held in the Undergraduate Resource Room in the School of Life Sciences. The Resource Room is open at regular times during teaching periods and the resources are specifically related to the needs of students on programmes in the School of Life Sciences. There are also networked PCs available for student use and printing facilities.

- The Keele Learning Environment (KLE), which provides easy access to a wide range of learning resources including lecture notes, electronic materials available in a repository maintained by the University Library and other resources - video, audio and text-based - accessible from external providers via the Internet.

## 17. Other Learning Opportunities

### Study abroad (semester)

Students on the programme have the potential opportunity to spend a semester abroad in their second year studying at one of Keele's international partner universities.

Exactly which countries are available depends on the student's choice of degree subjects. An indicative list of countries is on the website (<http://www.keele.ac.uk/studyabroad/partneruniversities/>); however this does not guarantee the availability of study in a specific country as this is subject to the University's application process for studying abroad.

No additional tuition fees are payable for a single semester studying abroad but students do have to bear the costs of travelling to and from their destination university, accommodation, food and personal costs. Depending on the destination they are studying at additional costs may include visas, study permits, residence permits, and compulsory health checks. Students should expect the total costs of studying abroad to be greater than if they study in the UK, information is made available from the Global Education Team throughout the process, as costs will vary depending on destination.

Whilst students are studying abroad any Student Finance eligibility will continue, where applicable students may be eligible for specific travel or disability grants. Students studying in Erasmus+ destinations may be eligible for grants as part of this programme. Students studying outside of this programme may be eligible for income dependent bursaries at Keele. Students travel on a comprehensive Keele University insurance plan, for which there are currently no additional charges. Some governments and/or universities require additional compulsory health coverage plans; costs for this will be advised during the application process.

### Study Abroad (International Year)

A summary of the International Year, which is a potential option for students after completion of year 2 (Level 5), is provided in the Annex for the International Year.

### Industrial placement

Students may undertake an industrial placement between years 2 and 3. This forms part of the Applied Life Sciences Placement module at Level 6.

Students wishing to carry out an industrial placement in the UK will be responsible for organising their own placement, with the support of the module tutors. This allows students to choose when and where to carry out their industrial placement, taking into consideration the potential living and travel expenses incurred and the effect on other opportunities available to earn money. Students are encouraged to consider the potential costs incurred in carrying out the industrial placements at the time of setting these up. Some placements attract a stipend or salary, which should be discussed with the potential employer before accepting the placement. Further guidance and support on these considerations is available from the module tutors.

Some Industrial placements are available at our partner research institutes throughout continental Europe. These placements attract a stipend from the European Union under the ERASMUS, but you should consider whether the amount offered will cover the costs of accommodation, travel and subsistence before accepting the placement. The ERASMUS tutor in the School of Life Sciences will give any guidance and support required.

### Other opportunities

During their time at Keele, Human Biology students also have the opportunity to hear from, and talk to, a range of guest speakers and presenters including researchers from around the world. Some of these activities are timetabled as part of taught modules, others are organised separately but are widely advertised and undergraduate students are always welcome to attend. Students can also undertake a 4 to 6 week summer placement funded by a bursary from organisations such as Society for the Study of Human Biology and Welcome Trust.

## 18. Additional Costs

As to be expected there will be additional costs for inter-library loans and potential overdue library fines, print and graduation. We do not anticipate any further costs for this undergraduate programme.

## 19. Quality management and enhancement

The quality and standards of learning in this programme are subject to a continuous process of monitoring, review and enhancement.

- The School Education Committee is responsible for reviewing and monitoring quality management and enhancement procedures

and activities across the School.

- Individual modules and the programme as a whole are reviewed and enhanced every year in the annual programme review which takes place at the end of the academic year.
- The programmes are run in accordance with the University's Quality Assurance procedures and are subject to periodic reviews under the Internal Quality Audit (IQA) process.

Student evaluation of, and feedback on, the quality of learning on every module takes place every year using a variety of different methods:

- The results of student evaluations of all modules are reported to module leaders and reviewed by the Programme Committee as part of annual programme review.
- Findings related to the programme from the annual National Student Survey (NSS), and from regular surveys of the student experience conducted by the University, are subjected to careful analysis and a planned response at programme and School level.
- Feedback received from representatives of students in all three years of the programme is considered and acted on at regular meetings of the Student Staff Voice Committee.

The University appoints senior members of academic staff from other universities to act as external examiners on all programmes. They are responsible for:

- Approving examination questions
- Confirming all marks which contribute to a student's degree
- Reviewing and giving advice on the structure and content of the programme and assessment procedures

Information about current external examiner(s) can be found here:

<http://www.keele.ac.uk/qa/externalexaminers/currentexternalexaminers/>

## 20. The principles of programme design

The programme described in this document has been drawn up with reference to, and in accordance with the guidance set out in, the following documents:

- a. UK Quality Code for Higher Education, Quality Assurance Agency for Higher Education: <http://www.qaa.ac.uk/quality-code>
- b. QAA Subject Benchmark Statement: Biosciences (2015) <https://www.qaa.ac.uk/quality-code/subject-benchmark-statements?indexCatalogue=document-search&searchQuery=biosciences&wordsMode=AllWords>
- c. Keele University Regulations and Guidance for Students and Staff: <http://www.keele.ac.uk/regulations>
- d. [RSB Accreditation Handbook](#)

## 21. Annex - International Year

### Human Biology with International Year

Please note: in order to be eligible to take the International Year option your other subject must also offer this option. Please refer to the information published in the course document for your other subject.

<b>International Year Programme</b>
<p>Students registered for this Combined Honours programme may either be admitted for or apply to transfer during their period of study at Level 5 to the Combined Honours programme in both their principal subjects, providing that they meet the progression criteria outlined in this document. Students accepted onto the International Year programme will have an extra year of study at an international partner institution after they have completed Year 2 (Level 5) at Keele.</p> <p>Students who successfully complete both the second year (Level 5) and the International Year will be permitted to progress to Level 6. Students who fail to satisfy the examiners in respect of the International Year will normally revert to the Combined Honours programme without the International Year and progress to Level 6 on that basis. The failure will be recorded on the student's final transcript.</p> <p>Study at Level 4, Level 5 and Level 6 will be as per the main body of this document. The additional detail contained in this annex will pertain solely to students registered for the International Year option.</p>
<b>International Year Programme Aims</b>
<p>In addition to the programme aims specified in the main body of this document, the international year programme of study aims to provide students with:</p> <ol style="list-style-type: none"><li>1. Personal development as a student and a researcher with an appreciation of the international dimension of their subject</li><li>2. Experience of a different culture, academically, professionally and socially</li></ol>

## Entry Requirements for the International Year

Students may apply to the 4-year programme during Level 5. Admission to the International Year is subject to successful application, interview and references from appropriate staff.

The criteria to be applied are:

- Academic Performance (an average of 60% across all modules in Semester 1 at Level 5 is normally required. Places on the International Year are then conditional on achieving an average mark of 54% across all Level 5 modules with no module fails. Where no Semester 1 marks have been awarded performance in 1st year marks and ongoing 2nd year assessments are taken into account)
- General Aptitude (to be demonstrated by application for study abroad, interview during the 2nd semester of year 2 (Level 5), and by recommendation of the student's personal tutor, 1st and 2nd year tutors and programme director)

Students may not register for both an International Year and a Placement Year.

## Student Support

Students will be supported whilst on the International Year via the following methods:

- Phone or Skype conversations with Study Abroad tutors, in line with recommended Personal Tutoring meeting points.
- Support from the University's Global Education Team

## Learning Outcomes

In addition to the learning outcomes specified in the main text of the Programme Specification, students who complete a Keele undergraduate programme with International Year will be able to:

1. Describe, discuss and reflect upon the cultural and international differences and similarities of different learning environments
2. Discuss the benefits and challenges of global citizenship and internationalisation
3. Explain how their perspective on their academic discipline has been influenced by locating it within an international setting.
4. Use independent research skills to identify relevant information resources on a range of subjects related, or complementary, to Biology.
5. Demonstrate the use of critical thinking skills, augmented by creativity and curiosity, in discussing the application of their International Year studies to Biology.

Please note that students on Combined Honours programmes with International Year must meet the subject-specific learning outcomes for BOTH their principal subjects.

These learning outcomes will all be assessed by the submission of a satisfactory individual learning agreement, the successful completion of assessments at the partner institution and the submission of the reflective portfolio element of the international year module.

## Course Regulations

Students registered for the International Year are subject to the programme-specific regulations (if any) and the University regulations. In addition, during the International Year, the following regulations will apply:

Students undertaking the International Year must complete 120 credits, which must comprise *at least 40%* in the student's discipline area.

This may impact on your choice of modules to study, for example you will have to choose certain modules to ensure you have the discipline specific credits required.

Students are barred from studying any module with significant overlap to the Level 6 modules to be studied on their return. Significant overlap with Level 5 modules previously studied should also be avoided.

## Additional costs for the International Year

Tuition fees for students on the International Year will be charged at 15% of the annual tuition fees for that year of study, as set out in Section 1. The International Year can be included in your Student Finance allocation, to find out more about your personal eligibility see: [www.gov.uk](http://www.gov.uk)

Students will have to bear the costs of travelling to and from their destination university, accommodation, food and personal costs. Depending on the destination they are studying at additional costs may include visas, study permits, residence permits, and compulsory health checks. Students should expect the total costs of studying abroad be greater than if they study in the UK, information is made available from the Global Education Team throughout the process, as costs will vary depending on destination.

Students studying in Erasmus+ destinations may be eligible for grants as part of this programme. Students studying outside of this programme may be eligible income dependent bursaries at Keele.

Students travel on a comprehensive Keele University insurance plan, for which there are currently no additional charges. Some Governments and/or universities require additional compulsory health coverage plans; costs for this will be advised during the application process.

## 22. Annex - Work Placement Year

### Human Biology with Work Placement Year

#### Work Placement Year summary

Students registered for this programme may either be admitted for or apply to transfer during their studies to the 'with Work Placement Year' option (NB: for Combined Honours students the rules relating to the work placement year in the subject where the placement is organised are to be followed). Students accepted onto this programme will have an extra year of study (the Work Placement Year) with a relevant placement provider after they have completed Year 2 (Level 5) at Keele.

Students who successfully complete both the second year (Level 5) and the Work Placement Year will be permitted to progress to Level 6. Students who fail to satisfactorily complete the Work Placement Year will normally revert to the 3-year programme and progress to Level 6 on that basis. The failure will be recorded on the student's final transcript.

Study at Level 4, Level 5 and Level 6 will be as per the main body of this document. The additional detail contained in this annex will pertain solely to students registered for the Work Placement Year option.

#### Work Placement Year Programme Aims

In addition to the programme aims specified in the main body of this document, the Work Placement Year aims to provide students with:

1. Experience of working in a subject-related laboratory or work place within an industrial, academic or public institution either in the UK or abroad

#### Entry Requirements for the Work Placement Year

Admission to the Work Placement Year is subject to successful application, interview and references from appropriate staff. Students have the opportunity to apply directly for the 4-year 'with work placement year' degree programme, or to transfer onto the 4-year programme at the end of Year-1 and in Year-2 at the end of Semester 1. Students who are initially registered for the 4-year degree programme may transfer onto the 3-year degree programme at any point in time, prior to undertaking the year-long work placement. Students who fail to pass the work placement year, and those who fail to meet the minimum requirements of the work placement year module (minimum 30 weeks full time (1,050 hours), or equivalent, work placement), will be automatically transferred onto the 3-year degree programme.

The criteria to be applied are:

- A good University attendance record and be in 'good academic standing'.
- Passed all Year-1 and Year-2 Semester 1 modules with an overall module average of > 60%
- General Aptitude (to be demonstrated by application(s) to relevant placement providers with prior agreement from the Programme Lead, interview during the 2nd semester of year 2 (Level 5), and by recommendation of the student's personal tutor and Programme Lead)
- Students undertaking work placements will be expected to complete a Health and Safety checklist prior to commencing their work experience and will be required to satisfy the Health and Safety regulations of the company or organisation at which they are based.
- (*International students only*) Due to visa requirements, it is not possible for international students who require a Tier 4 Visa to apply for direct entry onto the 4-year with Work Placement Year degree programme. Students wishing to transfer onto this programme should discuss this with student support, the academic tutor for the work placement year, and the Programme Lead. Students should be aware that there are visa implications for this transfer, and it is the student's responsibility to complete any and all necessary processes to be eligible for this programme. There may be additional costs, including applying for a new Visa from outside of the UK for international students associated with a transfer to the work placement programme.

Students may not register for both an International Year and a Work Placement Year.

#### **Student Support**

Students will be supported whilst on the Work Placement Year via the following methods:

- Regular contact between the student and a named member of staff who will be assigned to the student as their University supervisor. The University supervisor will be in regular contact with the student throughout the year, and be on hand to provide advice (pastoral or academic) and liaise with the Placement supervisor on the student's behalf if required.
- Two formal contacts with the student during the placement year: the University supervisor will visit the student in their placement organization at around the 5 weeks after placement has commenced, and then visit again (or conduct a telephone/video call tutorial) at around 15 weeks into the placement.
- Weekly supervision sessions will take place with the placement supervisor (or his/her nominee) throughout the duration of the placement.

#### **Learning Outcomes**

In addition to the learning outcomes specified in the main text of the Programme Specification, students who complete the 'with Work Placement Year' option will be able to:

1. Demonstrate an ability to successfully work within their placement institution and to learn practical skills and develop their science base within the scope of their work project.

These learning outcomes will be assessed through the Work Placement Year module (LSC-30019 (15 credits) or LSC-30038 (30 credits)).

#### **Regulations**

Students registered for the 'with Work Placement Year' option are subject to programme-specific regulations (if any) and the University regulations. In addition, during the Work Placement Year, the following regulations will apply:

- Students undertaking the Work Placement Year must successfully complete either the Applied Life Sciences Placement (LSC-30019) module or Double Applied Life Sciences Placement (LSC-30038) module.
- In order to ensure a high quality placement experience, each placement agency will sign up to a placement contract (analogous to a service level agreement).
- Once a student has been accepted by a placement organisation, the student will make a pre-placement visit and a member of staff identified within the placement contract will be assigned as the placement supervisor. The placement supervisor will be responsible for ensuring that the placement experience meets the agreed contract agreed with the University.
- The placement student will also sign up an agreement outlining his/her responsibilities in relation to the requirements of each organisation.

Students will be expected to behave professionally in terms of:

(i) conforming to the work practices of the organisation; and

(ii) remembering that they are representatives of the University and their actions will reflect on the School and have an impact on that organisation's willingness (or otherwise) to remain engaged with the placement.

#### **Additional costs for the Work Placement Year**

Tuition fees for students on the Work Placement Year will be charged at 20% of the annual tuition fees for that year of study, as set out in Section 1. The Work Placement Year can be included in your Student Finance allocation; to find out more about your personal eligibility see: [www.gov.uk](http://www.gov.uk)

Students will have to bear the costs of travelling to and from their placement provider, accommodation, food and personal costs. Depending on the placement provider additional costs may include parking permits, travel and transport, suitable clothing, DBS checks, and compulsory health checks.

A small stipend may be available to students from the placement provider during the placement but this will need to be explored on a placement-by-placement basis as some organisations, such as charities, may not have any extra money available. Students should budget with the assumption that their placement will be unpaid.

Eligibility for student finance will depend on the type of placement and whether it is paid or not. If it is paid, this is likely to affect student finance eligibility, however if it is voluntary and therefore unpaid, should not affect student finance eligibility. Students are required to confirm eligibility with their student finance provider.

International students who require a Tier 4 visa should check with the Immigration Compliance team prior to commencing any type of paid placement to ensure that they are not contravening their visa requirements.

## **23. Annex - Programme-specific regulations**

### **Programme Regulations: Human Biology (Combined Honours)**

<b>Final Award and Award Titles</b>	BSc (Hons) Human Biology BSc (Hons) Human Biology with International Year BSc (Hons) Human Biology with Work Placement Year
<b>Intermediate Award(s)</b>	BSc (Hons) Studies in Human Biology BSc (Hons) Studies in Human Biology with International Year BSc (Hons) Studies in Human Biology with Work Placement Year Diploma in Higher Education Certificate in Higher Education
<b>Last modified</b>	August 2019
<b>Programme Specification</b>	<a href="https://www.keele.ac.uk/qa/programmespecifications">https://www.keele.ac.uk/qa/programmespecifications</a>

The University's Academic Regulations which can be found on the Keele University website (<https://www.keele.ac.uk/regulations/>)[1] apply to and regulate the programme, other than in instances where the specific programme regulations listed below over-ride them. These programme regulations list:

- *Exemptions* which are characterised by the omission of the relevant regulation.
- *Variations* which are characterised by the replacement of part of the regulation with alternative wording.
- *Additional Requirements* which set out what additional rules that apply to students in relation to this programme.

The following **exemptions, variations** and **additional requirements** to the University regulations have been checked by Academic Services and have been approved by the Faculty Education Committee.

## A) EXEMPTIONS

The clause(s) listed below describe where an exemption from the University's Academic Regulations exists:

For the whole duration of their studies, students on this Programme are exempt from the following regulations:

- **No exemptions apply.**

## B) VARIATIONS

The clause(s) listed below describe where a variation from the University's Academic Regulations exists:

**No variations apply**

## Additional Requirements

The programme requirements listed below are in addition to the University's Academic Regulations:

### Additional requirement 1: Royal Society of Biology Accreditation

Students must achieve a pass standard in the Life Sciences Double Experimental Project with research skills assessment (or, subject to agreement, Double Applied Life Sciences Placement) to attain an accredited degree. For students who do not fulfil the conditions of this regulation, the degree award will be '*Studies in Human Biology*' and the degree will not be accredited by the Royal Society of Biology.

### Additional requirement 2: Attendance

Attendance at tutorials, seminars, workshops and laboratory sessions on this programme is compulsory. Failure to attend a class

without good cause will result in an informal warning. Failure to attend any subsequent classes without good cause will lead to the issuing of a formal University warning in accordance with Regulation 1A9 and could result in the requirement to withdraw from the university. Attendance at lectures is expected, but is not compulsory.

### **Additional requirement 3: Self-Certification**

Self-certification of illness as a reason for absence from compulsory classes will be accepted for no more than two periods of absence, each covering no more than 7 days, per semester. Any subsequent absence for reasons of illness must be accompanied by a doctor's note.

### **Additional requirement 4: Laboratory, lecture and tutorial classes**

1. Wearing a laboratory coat is compulsory in all laboratories. Students will not be allowed to attend the laboratory class without a laboratory coat.
2. Students must wear appropriate clothing in the laboratories, including sensible footwear. Closed shoes and low heels should be worn. This is to avoid tripping and to protect the feet in the case of spillages. Long hair must be tied back. Students who are inappropriately dressed may, at the discretion of the member of staff in charge, be excluded from the class and recorded as being absent without good cause.
3. Students who arrive late to laboratory classes may, at the discretion of the member of staff in charge, be excluded from the class and recorded as being absent without good cause.
4. Students who display serious misconduct in any class may, at the discretion of the member of staff in charge, be excluded from the class and recorded as being absent without good cause. Serious misconduct involves wilful damage to property, injury or threat to persons, or persistent disruption of teaching.
5. The unauthorised use of mobile phones or headphones is not permitted in any class.
6. Students are not permitted to record, video or photograph taught sessions or meetings with staff, except with the permission in advance of the staff concerned. Permission will be given where this is part of an approved disability adjustment. Any permission to record, video or photograph is for personal use only and all recordings, videos or photographs remain the property of the presenter and Keele University.

### **Additional requirement 5: Health and Safety**

Students are required to read and follow the procedures in the School of Life Sciences Safety Handbook, which is available from the Biomedical Science Noticeboard

[1] References to University Regulations in this document apply to the content of the University's Regulatory Framework as set out on the University website here <https://www.keele.ac.uk/regulations/>.

## **Version History**

### **This document**

**Date Approved:** 07 February 2020

### ***What's Changed***

Additional optional module at Level 6 (year 3) - LSC-30066 Tropical Biology Field Course

### **Previous documents**

<b>Version No</b>	<b>Year</b>	<b>Owner</b>	<b>Date Approved</b>	<b>Summary of and rationale for changes</b>
1	2019/20	EDWARD MCCAULEY	09 October 2019	