

Programme Specification: Undergraduate

For students starting in Academic Year 2018/2019

1. Course Summary

Names of programme(s) and award title(s)	BSc (Hons) Human Biology BSc (Hons) Human Biology with International Year (see Annex A for details) BSc (Hons) Human Biology with Work Placement Year 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
Award type	Combined Honours <i>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.</i>
Mode of study	Full time
Framework of Higher Education Qualification (FHEQ) level of final award	Level 6
Duration	3 years 4 years if an Applied Life Sciences Placement or International Year is included
Location of study	Keele University – main campus
Accreditation (if applicable)	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 section 12.
Regulator	Office for Students (OfS)
Tuition Fees	UK/EU students: Fee for 2018/19 is £9,250* International students: Fee for 2018/19 is £14,360** <i>(if combined with a non- laboratory-based Principal Subject)</i> <i>or</i> £15,480** <i>(if combined with a laboratory-based Principal Subject)</i>

* 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 at <http://www.keele.ac.uk/studentfunding/tuitionfees/>

	The fee for the international year abroad is calculated at 15% of the standard year fee The fee for the placement year is calculated at 20% of the standard year fee
Additional Costs	Refer to section 18

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.

2. What is a Combined Honours programme?

Combined Honours degrees are degrees that are taken in two different subjects, resulting in an *X and Y* degree title, for example *Human Biology and Biochemistry*. 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, for example *Human Biology with Biochemistry*.

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. N.B.

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 Health and Rehabilitation, School of Physical and Geographical Sciences, 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 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 course to course, 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 this 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.

Year	Compulsory	Optional		Electives	
		Min	Max	Min	Max
1	60	0	0	0	0
2	30	30	30	0	0
3*	15	45	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

Year 1 (Level 4)

Compulsory modules	Credits	Optional modules	Credits
Physiology and Anatomy	30	None	
Cellular Genetics and Evolution	30		

Year 2 (Level 5)

Compulsory modules	Credits	Optional modules <i>N.B. Students choose 2 modules from:</i>	Credits
Human Genetics	15	Neurodevelopment	15
Research and Analytical Skills	15	Human Impacts on the Environment, scientific perspectives	15
		Molecular, Cellular and Structural Immunology	15
		Microbes, Viruses and Parasites	15
		Nutrition and Energy Balance	15
		Health and the Environment	15
		Learning and Memory	15
		Study Abroad Modules	30

Year 3 (Level 6)

Compulsory modules	Credits	Optional modules <i>N.B. Students choose 2 modules from:</i>	Credits
<i>Students taking Human Biology and Biochemistry:</i> Life Sciences Double Experimental Project (with research skills assessment) OR Double Applied Life Sciences Placement ^{1,2}	30	Behavioural Neuroscience ³	15
		Human Parasitology ⁴	15
		Conservation Biology ⁵	15
	30	Advances in Medicine	15
		Brain Disease	15
<i>Students taking Human Biology and a subject outside of the School of Life Sciences:</i> Life Sciences Single Experimental Project (with research skills assessment) OR Life Sciences Dissertation OR Single Applied Life Sciences Placement ¹	15	Human Evolution	15
		Biology of Disease	15
	15	Cancer Biology	15
		Regeneration & Repair in the Nervous System ⁶	15
	15	Communication Skills for Biologists	15
15	Biomedical Engineering	15	

¹ The 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 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 Biochemistry

³ Prerequisite: Learning and Memory.

⁴ Prerequisite: Molecular, Cellular and Structural Immunology or Microbes, Viruses and Parasites.

⁵ Prerequisite: Human Impacts on the Environment, scientific perspectives.

⁶ Prerequisite: Neurodevelopment.

Note: All option module combinations are subject to timetabling.

NB: if you choose to specialise in Human Biology in your final year you will study the following modules:

Compulsory modules	Credits	Optional modules <i>N.B. Students choose six 15-credit modules from the optional/elective choices below*</i>	Credits
Life Sciences Double Experimental Project (with research skills assessment) ² Or Double Applied Life Sciences Placement ¹	30	Behavioural Neuroscience ³	15
		Human Parasitology ⁴	15
		Conservation Biology ⁵	15
	30	Advances in Medicine	15
		Brain Disease	15
		Human Evolution	15
		Biology of Disease	15
		Cancer Biology	15
		Regeneration & Repair in the Nervous System ⁶	15
		Communication Skills for Biologists	15
		Biomedical Engineering	15

For further information on the content of modules currently offered, including the list of elective modules, please visit: www.keele.ac.uk/recordsandexams/az

Learning Outcomes

The table below sets out what students learn in each year of the Programme, the modules in which that learning takes place, and the main ways in which students are assessed on their learning. 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.

Year 1 (Level 4)

Subject Knowledge and Understanding		
Learning Outcome	Module in which this is delivered	Principal forms of assessment (of the Level Outcome) used
<i>Successful students will be able to demonstrate knowledge and understanding of:</i>		
U1: the biology of the human body including the mechanisms of life at molecular, cellular and physiological levels and also at the global	Cellular Genetics and Evolution Physiology and Anatomy	Class Test Lab Report Practical based Assessment

community level, and its evolution from the geological past to the present, using a multidisciplinary approach		Poster – Group Oral presentation - Group Seen Exam Unseen Exam
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 Physiology and Anatomy	Class Test Lab Report Practical based Assessment Poster – Group Oral presentation - Group Seen Exam Unseen Exam
U3: the basic experimental skills appropriate to the discipline under study that address areas of anatomy, physiology, immunology and genetics	Cellular Genetics and Evolution Physiology and Anatomy	Class Test Lab Report Practical based Assessment Poster – Group Oral presentation - Group Seen Exam Unseen Exam
U4: the approaches to acquiring, interpreting, analysing biological data from a variety of sources, including the use of statistics	Cellular Genetics and Evolution Physiology and Anatomy	Class Test Lab Report Practical based Assessment Poster – Group Oral presentation - Group Seen Exam Unseen Exam
U5: the contribution of research to the development of biological knowledge	Cellular Genetics and Evolution Physiology and Anatomy	Class Test Lab Report Practical based Assessment Poster – Group Oral presentation - Group Seen Exam Unseen Exam
U6: the dynamic, plural and contested nature of the discipline and an awareness of the philosophical and ethical issues involved	Cellular Genetics and Evolution Physiology and Anatomy	Class Test Lab Report Practical based Assessment Poster – Group Oral presentation - Group Seen Exam Unseen Exam
U7: the use of biological terminology, nomenclature and classification systems	Cellular Genetics and Evolution Physiology and Anatomy	Class Test Lab Report Practical based Assessment Poster – Group Oral presentation - Group

		Seen Exam Unseen Exam
U8: the relevance of biology to practical problems and improving the quality and sustainability of life	Cellular Genetics and Evolution Physiology and Anatomy	Class Test Lab Report Practical based Assessment Poster – Group Oral presentation - Group Seen Exam Unseen Exam
U9: the applicability of the biosciences to the careers to which graduates will be progressing	Cellular Genetics and Evolution Physiology and Anatomy	Class Test Lab Report Practical based Assessment Poster – Group Oral presentation - Group Seen Exam Unseen Exam
U10: be aware of current developments in biochemistry and molecular biology including areas of ethical or public concern	Cellular Genetics and Evolution Physiology and Anatomy	Class Test Lab Report Practical based Assessment Poster – Group Oral presentation - Group Seen Exam Unseen Exam
U11: be able to demonstrate and ability to mine, manipulate and interpret data from small molecule and macromolecular databases	Cellular Genetics and Evolution Physiology and Anatomy	Class Test Lab Report Practical based Assessment Poster – Group Oral presentation - Group Seen Exam Unseen Exam

Subject Specific Skills		
Learning Outcome	Module in which this is delivered	Principal forms of assessment (of the Level Outcome) used
<i>Successful students will be able to:</i>		
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 Physiology and Anatomy	Class Test Lab Report Practical based Assessment Poster – Group Oral presentation - Group Seen Exam Unseen Exam
S2: analyse, synthesise and evaluate	Cellular Genetics and Evolution	Class Test

information critically, and use appropriate literature with a full and critical understanding	Physiology and Anatomy	Seen Exam Unseen Exam
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	Cellular Genetics and Evolution Physiology and Anatomy	Lab Report Practical based Assessment Class Test Seen Exam Unseen Exam
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 Physiology and Anatomy	Class Test Lab Report Practical based Assessment Poster – Group Oral presentation - Group Seen Exam Unseen Exam
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 Physiology and Anatomy	Class Test Lab Report Practical based Assessment Poster – Group Oral presentation - Group Seen Exam Unseen Exam
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 Physiology and Anatomy	Lab Report Practical based Assessment
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	Cellular Genetics and Evolution Physiology and Anatomy	Class Test Lab Report Practical based Assessment Poster – Group Oral presentation - Group Seen Exam Unseen Exam
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	Cellular Genetics and Evolution Physiology and Anatomy	Class Test Lab Report Practical based Assessment Poster – Group Oral presentation - Group

		Seen Exam Unseen Exam
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Key or Transferable Skills (graduate attributes)		
Learning Outcome	Module in which this is delivered	Principal forms of assessment (of the Level Outcome) used
<i>Successful students will be able to:</i>		
E1: develop and sustain effective approaches to learning and study, including time management, flexibility, creativity and intellectual integrity	Cellular Genetics and Evolution Physiology and Anatomy	Class Test Lab Report Practical based Assessment Poster – Group Oral presentation - Group Seen Exam Unseen Exam
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 Physiology and Anatomy	Class Test Lab Report Practical based Assessment Poster – Group Oral presentation - Group Seen Exam Unseen Exam
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	Cellular Genetics and Evolution Physiology and Anatomy	Poster – Group Oral presentation - Group
E4: develop an adaptable, flexible, sustainable and effective approach to study and work, including time management, creativity and intellectual integrity	Cellular Genetics and Evolution Physiology and Anatomy	Class Test Lab Report Practical based Assessment Poster – Group Oral presentation - Group Seen Exam Unseen Exam
E5: develop the skills necessary for self-managed and lifelong learning (e.g. working independently, time management, organisational, enterprise and knowledge transfer skills)	Cellular Genetics and Evolution Physiology and Anatomy	Class Test Lab Report Practical based Assessment Poster – Group Oral presentation - Group Seen Exam Unseen Exam

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 Physiology and Anatomy	Lab Report Practical based Assessment Poster – Group Oral presentation - Group
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	Cellular Genetics and Evolution Physiology and Anatomy	Poster – Group Oral presentation - Group
E8: identify and work towards targets for personal, academic and career development	Cellular Genetics and Evolution Physiology and Anatomy	Class Test Lab Report Practical based Assessment Poster – Group Oral presentation - Group Seen Exam Unseen Exam

Year 2 (Level 5)

Subject Knowledge and Understanding		
Learning Outcome	Module in which this is delivered	Principal forms of assessment (of the Level Outcome) used
<i>Successful students will be able to demonstrate knowledge and understanding of:</i>		
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	Practical report IT report Essay Group presentation Ethics Essay Statistical analysis Public Information leaflet Book Chapter – Group MCQ test Unseen exam
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	Practical report IT report Essay Group presentation Ethics Essay Statistical analysis Public Information leaflet Book Chapter – Group

	<p>Learning and Memory Life Sciences Study Abroad Human Genetics Research and Analytical Skills</p>	<p>MCQ test Unseen exam</p>
<p>U3: the basic experimental skills appropriate to the discipline under study that address areas of anatomy, physiology, immunology and genetics</p>	<p>Neurodevelopment Molecular, Cellular and Structural Immunology Nutrition and Energy Balance</p>	<p>Practical report</p>
<p>U4: the approaches to acquiring, interpreting, analysing biological data from a variety of sources, including the use of statistics</p>	<p>Neurodevelopment Molecular, Cellular and Structural Immunology Nutrition and Energy Balance Research and Analytical Skills</p>	<p>Practical report Statistical analysis</p>
<p>U5: the contribution of research to the development of biological knowledge</p>	<p>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</p>	<p>Practical report IT report Essay Group presentation Ethics Essay Statistical analysis Public Information leaflet Book Chapter – Group MCQ test Unseen exam</p>
<p>U6: the dynamic, plural and contested nature of the discipline and an awareness of the philosophical and ethical issues involved</p>	<p>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</p>	<p>Practical report IT report Essay Group presentation Ethics Essay Statistical analysis Public Information leaflet Book Chapter – Group MCQ test Unseen exam</p>
<p>U7: the use of biological terminology, nomenclature and classification systems</p>	<p>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</p>	<p>Practical report IT report Essay Group presentation Ethics Essay Statistical analysis Public Information leaflet Book Chapter – Group</p>

	<p>Learning and Memory Life Sciences Study Abroad Human Genetics Research and Analytical Skills</p>	<p>MCQ test Unseen exam</p>
<p>U8: the relevance of biology to practical problems and improving the quality and sustainability of life</p>	<p>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</p>	<p>Practical report IT report Essay Group presentation Ethics Essay Statistical analysis Public Information leaflet Book Chapter – Group MCQ test Unseen exam</p>
<p>U9: the applicability of the biosciences to the careers to which graduates will be progressing</p>	<p>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</p>	<p>Practical report IT report Essay Group presentation Ethics Essay Statistical analysis Public Information leaflet Book Chapter – Group MCQ test Unseen exam</p>
<p>U10: be aware of current developments in biochemistry and molecular biology including areas of ethical or public concern</p>	<p>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</p>	<p>Practical report IT report Essay Group presentation Ethics Essay Statistical analysis Public Information leaflet Book Chapter – Group MCQ test Unseen exam</p>
<p>U11: be able to demonstrate and ability to mine, manipulate and interpret data from small molecule and macromolecular databases</p>	<p>Neurodevelopment Human Impacts on the Environment, scientific perspectives Molecular, Cellular and Structural Immunology Microbes, Viruses and Parasites</p>	<p>Practical report IT report Essay Group presentation Ethics Essay Statistical analysis</p>

	Nutrition and Energy Balance Health and the Environment Learning and Memory Life Sciences Study Abroad Human Genetics Research and Analytical Skills	Public Information leaflet Book Chapter – Group MCQ test Unseen exam
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Subject Specific Skills		
Learning Outcome	Module in which this is delivered	Principal forms of assessment (of the Level Outcome) used
<i>Successful students will be able to:</i> 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	Practical report IT report Essay Group presentation Ethics Essay Statistical analysis Public Information leaflet Book Chapter – Group MCQ test Unseen exam
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	Practical report IT report Essay Group presentation Ethics Essay Statistical analysis Public Information leaflet Book Chapter – Group MCQ test Unseen exam
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	Neurodevelopment Molecular, Cellular and Structural Immunology Nutrition and Energy Balance	Practical report
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	Group presentation

S5: to think independently to apply subject knowledge and understanding to address familiar and unfamiliar problems; to plan tasks and solve problems	Neurodevelopment Molecular, Cellular and Structural Immunology Nutrition and Energy Balance	Practical report
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 Health and the Environment	Group presentation
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	Practical report IT report Essay Group presentation Ethics Essay Statistical analysis Public Information leaflet Book Chapter – Group MCQ test Unseen exam
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	Practical report IT report Essay Group presentation Ethics Essay Statistical analysis Public Information leaflet Book Chapter – Group MCQ test Unseen exam

Key or Transferable Skills (graduate attributes)		
Learning Outcome	Module in which this is delivered	Principal forms of assessment (of the Level Outcome) used
<i>Successful students will be able to:</i>		
E1: develop and sustain effective approaches to learning and study,	Neurodevelopment Human Impacts on the	Practical report IT report

including time management, flexibility, creativity and intellectual integrity	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	Essay Group presentation Ethics Essay Statistical analysis Public Information leaflet Book Chapter – Group MCQ test Unseen exam
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	Research and Analytical Skills Health and the Environment Microbes, Viruses and Parasites	Group presentation Book Chapter – Group
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	Group presentation Book Chapter – Group Practical report
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	Practical report IT report Essay Group presentation Ethics Essay Statistical analysis Public Information leaflet Book Chapter – Group MCQ test Unseen exam
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	Practical report IT report Essay Group presentation Ethics Essay Statistical analysis

	<p>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</p>	<p>Public Information leaflet Book Chapter – Group MCQ test Unseen exam</p>
<p>E6: cite and reference work in an appropriate manner, ensuring academic integrity and the avoidance of plagiarism whether intentional or not</p>	<p>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</p>	<p>Practical report IT report Essay Group presentation Ethics Essay Statistical analysis Public Information leaflet Book Chapter – Group MCQ test Unseen exam</p>
<p>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</p>	<p>Research and Analytical Skills Health and the Environment Microbes, Viruses and Parasites Neurodevelopment Molecular, Cellular and Structural Immunology Nutrition and Energy Balance</p>	<p>Group presentation Book Chapter – Group Practical report</p>
<p>E8: identify and work towards targets for personal, academic and career development</p>	<p>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</p>	<p>Practical report IT report Essay Group presentation Ethics Essay Statistical analysis Public Information leaflet Book Chapter – Group MCQ test Unseen exam</p>

Year 3 (Level 6)

Subject Knowledge and Understanding		
Learning Outcome	Module in which this is delivered	Principal forms of assessment (of

<i>Successful students will be able to demonstrate knowledge and understanding of:</i>		the Level Outcome) used
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)	Dissertation Essay writing Oral presentation – individual Unseen Exam Poster – individual Conservation Management Report Practical assessment Ethical awareness Risk Assessment Laboratory Report Literature Review Grant proposal Peer review of grant proposal Class test Article for lay audience
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)	Dissertation Essay writing Oral presentation – individual Unseen Exam Poster – individual Conservation Management Report Practical assessment Ethical awareness Risk Assessment Laboratory Report Literature Review Grant proposal Peer review of grant proposal Class test Article for lay audience
U3: the basic experimental skills	Life Sciences Double Experimental	Practical assessment

appropriate to the discipline under study that address areas of anatomy, physiology, immunology and genetics	Project (with research skills assessment) – ISP (Double) Life Sciences Single Experimental Project (with research skills assessment) – ISP (single) Applied Life Sciences Placement – ISP (single)	Ethical awareness Risk Assessment Laboratory Report
U4: the approaches to acquiring, interpreting, analysing biological data from a variety of sources, including the use of statistics	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	Practical assessment Ethical awareness Risk Assessment Laboratory Report Scientific Poster-individual
U5: the contribution of research to the development of biological knowledge	All modules	All assessments
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)	Practical assessment Ethical awareness Risk Assessment Laboratory Report
U7: the use of biological terminology, nomenclature and classification systems	All modules	All assessments
U8: the relevance of biology to practical problems and improving the quality and sustainability of life	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	Practical assessment Ethical awareness Risk Assessment Laboratory Report Dissertation Portfolio of Communication
U9: the applicability of the biosciences to the careers to which graduates will be progressing	All modules	All assessments
U10: be aware of current developments in biochemistry and molecular biology including areas of	All modules	All assessments

ethical or public concern		
U11: be able to demonstrate and ability to mine, manipulate and interpret data from small molecule and macromolecular databases	All modules	All assessments

Subject Specific Skills		
Learning Outcome	Module in which this is delivered	Principal forms of assessment (of the Level Outcome) used
<i>Successful students will be able to:</i>		
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	All assessments
S2: analyse, synthesise and evaluate information critically, and use appropriate literature with a full and critical understanding	All modules	All assessments
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	All assessments
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	All assessments
S5: to think independently to apply subject knowledge and understanding to address familiar and unfamiliar problems; to plan tasks and solve problems	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	Practical assessment Ethical awareness Risk Assessment Laboratory Report Portfolio of Communication Scientific Poster- individual
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	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	Practical assessment Ethical awareness Risk Assessment Laboratory Report

construct grammatically correct documents in an appropriate academic style using and referencing relevant ideas and evidence	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)	Practical assessment Ethical awareness Risk Assessment Laboratory Report
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	All assessments

Key or Transferable Skills (graduate attributes)		
Learning Outcome	Module in which this is delivered	Principal forms of assessment (of the Level Outcome) used
<i>Successful students will be able to:</i>		
E1: develop and sustain effective approaches to learning and study, including time management, flexibility, creativity and intellectual integrity	All modules	All assessments
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	All assessments
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)	Practical assessment Ethical awareness Risk Assessment Laboratory Report
E4: develop an adaptable, flexible, sustainable and effective approach to study and work, including time management, creativity and	All modules	All assessments

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)	All modules	All assessments
E6: cite and reference work in an appropriate manner, ensuring academic integrity and the avoidance of plagiarism whether intentional or not	All modules	All assessments
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	All assessments
E8: identify and work towards targets for personal, academic and career development	All modules	All assessments

9. Final and intermediate awards

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

Honours Degree	360 credits	You will require at least 120 credits at levels 4, 5 and 6. Combined Honours: 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 X <i>and</i> Y (e.g. Human Biology and Biochemistry). 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 X <i>with</i> Y (e.g. Human Biology with Biochemistry).
Diploma in Higher Education	240 credits	You will require at least 120 credits at level 4 or higher and at least 120 credits at level 5 or higher
Certificate in Higher Education	120 credits	You will require at least 120 credits at level 4 or higher

Human Biology with International Year: in addition to the above students must pass a module covering the international year in order to graduate with a named degree in Human Biology with international year. Students who do not complete, or fail the international year, will be transferred to the three-year Human Biology programme.

Human Biology with Work Placement Year: 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 in Human Biology with

Work Placement year. Students who do not complete, or fail the placement year, will be transferred to the three-year Human Biology programme.

10. How is the Programme assessed?

The wide variety of assessment methods used within Human Biology 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 within Human Biology:

- **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	Year 1 (Level 4)	Year 2 (Level 5)	Year 3 (Level 6)
Scheduled learning and teaching activities	26%	24%	15%
Guided independent Study	74%	76%	85%
Placements	0%	0%	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. 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/>

Course 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.

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.

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.

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.

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.

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

14. What are the typical admission requirements for the programme?

Subject	A-level	Subjects not included	International Baccalaureate	BTEC	Access to Higher Education Diploma	GCSE requirements
Human Biology	<p>ABC / BBB</p> <p>To include 1 science subject (A level Biology, Chemistry, Geology, Human Biology, Maths, Statistics, Physics, Sports Science, Applied Science, Environmental Science, Geography, Geology or Psychology)</p> <p>A Pass in Science Practical will be required if taking A level Biology, Chemistry or Physics (England) **</p> <p>** Science practical only required from applicants taking reformed A level Biology, Chemistry or Physics in England.</p>	None	30 points to include Higher Level Biology, Chemistry, Physics or Geography at 6 or above	DDM in a Science based subject	Obtain Access to Higher Education Diploma with 30 Level 3 credits at Distinction. You must also have taken sufficient Science credits, please contact us for advice.	Maths @ C (or 4) English Lang @ C (or 4)

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.

Accreditation of Prior Learning (APL) 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 Human Biology 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 at Annex A.

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 Wellcome 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 Human Biology are subject to a continuous process of monitoring, review and enhancement.

- The Learning and Teaching Committee of the School of Life Sciences is responsible for reviewing and monitoring quality management and enhancement procedures and activities across the School.
- Individual modules and the Human Biology 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 and as part of the University's Curriculum Annual Review and Development (CARD) process.
- 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 Human Biology 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 the Curriculum Annual Review and Development (CARD) process.
- Findings related to the Human Biology 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 Human Biology 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 Human Biology 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) http://www.qaa.ac.uk/docs/qaa/subject-benchmark-statements/sbs-biosciences-15.pdf?sfvrsn=4eef781_24
- c. [RSB Accreditation Handbook](#)
- d. Keele University Regulations and Guidance for Students and Staff:
<http://www.keele.ac.uk/regulations>

21. Document Version History

Date of first approved version (v1.0): 22nd September 2017

Revision history

Version number¹	Author	Date	Summary of and rationale for changes
2.0	Glenn Hussey	May 2019	Removal of 'Life Sciences Non-experimental project' module and 'Development Biology' optional modules at Level 6; addition of 'Communication Skills for Biologists' optional module

¹ 1.1, 1.2 etc. are used for minor changes and 2.0, 3.0 etc. for major changes (as defined in the University's Guidance on processes supporting curriculum changes)

Annex A

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.

International Year Programme
<p>Students registered for Combined Honours Human Biology 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 'Human Biology with International Year'.</p>
International Year Programme Aims
<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">1. Personal development as a student and a researcher with an appreciation of the international dimension of their subject2. Experience of a different culture, academically, professionally and socially
Entry Requirements for the International Year
<p>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.</p> <p>The criteria to be applied are:</p> <ul style="list-style-type: none">• Academic Performance (an average of 60% across all modules at Level 5 is normally required)• 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)
Student Support
<p>Students will be supported whilst on the International Year via the following methods:</p> <ul style="list-style-type: none">• 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
<p>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:</p> <ol style="list-style-type: none">i) Describe, discuss and reflect upon the cultural and international differences and similarities of

- different learning environments
- ii) Discuss the benefits and challenges of global citizenship and internationalisation
 - iii) Explain how their perspective on their academic discipline has been influenced by locating it within an international setting.

In addition, students who complete 'Human Biology with International Year' will be able to:

- iv) Use independent research skills to identify relevant information resources on a range of subjects related, or complementary, to Biology.
- v) 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 'Human Biology with International Year' are subject to the course 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 Human Biology module with significant overlap to 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

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.