

**Programme Specification**

**Title of Course: BSc (Hons) Animal Science**

**Date Specification Produced: January 2019**

**Date Specification Last Revised: June 2019**

This Programme Specification is designed for prospective students, current students, academic staff and employers. It provides a concise summary of the main features of the programme and the intended learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if they take full advantage of the learning opportunities that are provided. More detailed information on the teaching, learning and assessment methods, learning outcomes and content of each module can be found in the Course Guide, on Moodle and in individual Module Descriptors.

**SECTION 1: GENERAL INFORMATION**

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| **Title:** | BSc (Hons) Animal Science  |
| **Awarding Institution:** | Kingston University |
| **Teaching Institution:** | Activate Learning |
| **Location:** | Merrist Wood College |
| **Programme Accredited by:** | N/A  |

**SECTION 2: THE PROGRAMME**

1. **Programme Introduction**

This programme has been designed to develop a deeper understanding of knowledge and skills established on a Foundation Degree in Animal Science (and equivalent courses) and provides a progressive step to a level of study requiring more evaluative and analytical approaches. The programme enables a deeper engagement with the scientific disciplines that underpin the management of captive, productive and companion animals. It will help you to further develop your skills in applying scientific principles of inheritance and reproduction, immunology, parasitology and cognition, enabling the development of key skills for employment within various sectors. Assessments are designed to allow students to research their chosen topics and species of interest for subject areas they would wish to specialise in, linking to career aspirations.

Teaching and learning will take place on the 400-acre Merrist Wood campus, a multi-award-winning college specialising in the land-based industries which is widely recognised within the industry. The state-of-the-art Animal Management Centre is home to over 1,000 animals and includes an arid biome, tropical biome, nocturnal room and large husbandry room. Merrist Wood was recently awarded a Zoo Licence, allowing the introduction of further rare and exotic species to the animal collection and share it with the wider community. This also provides students with real-life work experience, teaching the public about important welfare and conservation issues, breeding projects and bio-diversity. The College also has a track record of successfully breeding wild animals, including endangered species such as the red squirrel, and has a fully functioning farm with rare breed animals, one of largest indoor riding arenas of any college in the country, an outdoor floodlit warm up arena and stabling for up to 40 horses. A new Wildlife Hospital is planned to open at Merrist Wood during 2020.

We have laboratories on-site as well as working relationships with nearby scientific institutions.

The teaching team comprises of a range of friendly, approachable tutors who have worked in industry and continue to undertake vocational continuous professional development to remain current with their subject specialism. This vocational currency gives a real edge to course content and value is added through guest speakers, visits and realistic work-based learning assessments. Teaching staff regularly liaise with colleagues employed within the sector to ensure that they remain agile and focused on the needs and skills required by the industry.

An inclusive environment for learning anticipates the varied requirements of learners, and aims to ensure that all students have equal access to educational opportunities. A wide range of teaching and learning methods are used to accommodate different learning styles and engage students throughout the programme. This is complemented by a creative approach to the range of assessments, enabling students to apply theoretical knowledge to practical scenarios relevant to industry. Throughout the course there is a reliance on student-centred modes of learning, which fosters the development of a professional approach to lifelong learning.

This programme aims to equip students with the skills and knowledge necessary to gain employment in a wide range of roles relating to animal science.

1. **Aims of the Field/Course**

The main aims of the programme are to: -

* Present a cohesive programme of study building on the underpinning knowledge gained in the Foundation Degree in Animal Science
* Produce graduates equipped with in-depth knowledge and critical understanding of animal health, behaviour and breeding issues.
* Enable students to carry out independent research into current issues related to animal science
* Develop students’ practical skills to enhance management of breeding stock and improve health of a wide range of species.
* Guide students in the use of scientific information to inform decision-making processes.
* Prepare graduates for employment in a wide range of contexts where animal scienceanimal science will be applied, or for further study.
* Provide opportunity for the development of key transferable skills relevant to the student’s future careers.

It provides both academic rigour and vocational skills needed to meet the demands of employment in a wide range of animal related industries.

1. **Intended Learning Outcomes**

The programme outcomes are referenced to the QAA subject benchmarks for Agriculture, Horticulture, Forestry, Food, Nutrition and Consumer Sciences 2016, the [Framework for Higher Education Qualifications of UK Degree-Awarding Bodies (2014)](http://www.qaa.ac.uk/quality-code/the-existing-uk-quality-code/part-a-setting-and-maintaining-academic-standards), and relate to the typical student. The course provides opportunities for students to develop and demonstrate knowledge and understanding specific to the subject, key skills and graduate attributes in the following areas: Animal Science D300.

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| **Programme Learning Outcomes** |
|  | **Knowledge and Understanding**On completion of the course students will be able to: |  | **Intellectual Skills**On completion of the course students will be able to |  | **Subject Practical Skills**On completion of the course students will be able to |
| A1 | Exhibit understanding of the defining elements of animal science as a result of in-depth study or research | B1 | Critically analyse, synthesise and summarise information from a variety of sources | C1 | Collect and record diverse types of information generated by a wide range of methodologies and summarise it using appropriate qualitative and/or quantitative techniques |
| A2 | Demonstrate a systematic understanding of the knowledge base and its interrelationship with other fields of study  | B2 | Recognise and use appropriate theories, concepts and principles from a range of subjects | C2 | Devise, plan and undertake field, laboratory or other investigations in a responsible, sensitive and safe manner, paying due diligence to risk assessment, ethical and data protection issues, rights of access, and relevant health and safety issues |
| A3 | Recognise appropriate theories, concepts and principles from a range of disciplines and apply them in practice to a range of animal health, behaviour and breeding scenarios | B3 | Collect, analyse and integrate several lines of evidence to develop balanced arguments demonstrating critical thinking and synthesis | C3 | Acquire subject-specific practical and professional competencies |
| A4 | Evaluate key concepts of inheritance and reproduction, immunology and parasitology | B4 | Demonstrate creativity and innovation balanced by ethical awareness | C4 | Take account of safety regulations, legal requirements including intellectual property rights, and the impact of investigations on the environment |

In addition to the programme learning outcomes identified overleaf, the programme of study defined in this programme specification will allow students to develop a range of Key Skills as follows:

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| **Key Skills** |
| **Self-Awareness Skills** | **Communication Skills** | **Interpersonal Skills** | **Research and information Literacy Skills** | **Numeracy Skills** | **Management & Leadership Skills** | **Creativity and Problem Solving Skills** |
| Take responsibility for own learning and plan for and record own personal development | Express ideas clearly and unambiguously in writing and the spoken work | Work well with others in a group or team | Search for and select relevant sources of information | Collect data from primary and secondary sources and use appropriate methods to manipulate and analyse this data | Determine the scope of a task (or project) | Apply scientific and other knowledge to analyse and evaluate information and data and to find solutions to problems |
| Recognise own academic strengths and weaknesses, reflect on performance and progress and respond to feedback | Present, challenge and defend ideas and results effectively orally and in writing | Work flexibly and respond to change | Critically evaluate information and use it appropriately | Present and record data in appropriate formats | Identify resources needed to undertake the task (or project) and to schedule and manage the resources | Work with complex ideas and justify judgements made through effective use of evidence |
| Organise self effectively, agreeing and setting realistic targets, accessing support where appropriate and managing time to achieve targets | Actively listen and respond appropriately to ideas of others | Discuss and debate with others and make concession to reach agreement | Apply the ethical and legal requirements in both the access and use of information | Interpret and evaluate data to inform and justify arguments | Evidence ability to successfully complete and evaluate a task (or project), revising the plan where necessary |  |
| Work effectively with limited supervision in unfamiliar contexts |  | Give, accept and respond to constructive feedback | Accurately cite and reference information sources | Be aware of issues of selection, accuracy and uncertainty in the collection and analysis of data | Motivate and direct others to enable an effective contribution from all participants |  |
|  |  | Show sensitivity and respect for diverse values and beliefs | Use software and IT technology as appropriate |  |  |  |

1. **Entry Requirements**

The minimum entry qualifications for the programme are:

From Foundation Degree (FdSc) or Higher National Diploma (HND): Pass in a related subject area. Entry from courses completed at other Higher Education Institutions is subject to satisfactorily meeting the KU requirements applicable to RPCL / RPEL.

Plus: Candidates are normally required to hold five GCSE subjects at grades A\*–C or 4+ including Mathematics, English Language and a Science based subject.

A minimum IELTS score of 6 with a minimum 5.5 in each component, TOEFL 5.5 or equivalent is required for those for whom English is not their first language.

1. **Course Structure**

This programme is offered in full-time or part-time mode, and leads to the award of BSc (Hons) Animal Science and is available as a full-field. Entry is at Level 6 with FdSc or equivalent qualifications (see section D). Intake is normally in September.

**E1. Professional and Statutory Regulatory Bodies**

N/A

**E2. Work-based learning, including sandwich courses**

Work placements are actively encouraged but are not a compulsory requirement of the course. It is the responsibility of individual students to source and secure such placements. Completing work placements allows students to reflect upon their own personal experience of working in an applied setting and relate to theoretical concepts, providing the opportunity to evaluate the relationship between theory and practice.

**E3. Outline Programme Structure**

The programme is made up of four modules, each worth 30 credits. Typically a student must complete 120 credits at each level. All students will be provided with the University regulations and specific additions that are sometimes required for accreditation by outside bodies (e.g. professional or statutory bodies that confer professional accreditation). Full details of each module will be provided in module descriptors and student module guides.

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| **Level 6**  |
| **Core modules** | **Module code** | **Credit** **Value** | **Level** | **Teaching Block** |
| Animal Cognition | SG6962 | 30 | 6 | All |
| Principles of Genetics, Reproduction and Breed Development  | SG6969 | 30 | 6 | All |
| Principles of Immunology and Parasitology | SG6970 | 30 | 6 | All |
| Research Project | SG6906 | 30 | 6 | All |

1. **Principles of Teaching, Learning and Assessment**

This programme is designed to develop a student’s knowledge, understanding, cognitive and practical skills and key transferable skills at Level 6. A range of teaching styles and activities will be used to reflect the diversity of the group’s learning needs. These include lectures, tutorials and seminars, student-led seminars, practical classes, literature and field-based research, educational visits, specialist external lectures, directed self-study, working in groups, and e-learning technologies including the use of Moodle; the VLE. Students will also complete regular laboratory practicals for immunology, parasitology and the breeding modules e.g. faecal egg counts. These will include use of a variety of equipment and techniques. The teaching and learning strategies selected enable the development of reflective and critical approaches to the study of animal science. The ultimate goal of student learning is the considered application of knowledge and skills together with an appreciation of the integrative nature of the subject areas in an appropriate context. This range of strategies accommodates different learning styles and enables the programme delivery to be more inclusive, engaging and interesting for all.

Where appropriate, guest speakers and educational visits to a range of working environments are used to support the learning. This could include visits to Pirbright Laboratories, the APHA, other university laboratories and animal breeding facilities such as stud farms. This is of considerable benefit to students as it enables new and unique experiences. These additional learning experiences enable students to support their learning in context and allow a network of contacts to develop.

Different types of media are used to assist the delivery of course content in addition to the use of Moodle. Students can use Moodle to access course materials, engage in discussion forums with staff and students, complete activities and share resources in support of their independent study. Students will also be able to utilise VR technology, for example to journey through cells and complete virtual dissections.

Although placements are not compulsory, students are encouraged to engage with voluntary placements to support their teaching, learning and assessment. Suitable placements would be recommended at a research laboratory, animal feed companies, the APHA or stud farms for example.

Emphasis is placed on developing evaluative and analytical approaches and problem-solving skills and this is a key focus within the assessment programme. The assessment strategy promotes authentic learning and flexibility to equip students to work in this diverse field. Assessments are designed to allow students to develop subject specific skills and knowledge, and to research topics/species of interest linked to subject areas they would wish to specialise in and career aspirations. Assessments include formative opportunities to receive developmental feedback; and summative assessment which assesses progress formally. Students are expected to fully engage with the formative approach in order to take control of their own development. The assessment loading is carefully planned to balance workloads across the year, as far as possible. The summative assessment schedule is made available at the beginning of the year and provides a clear plan against which students can identify their workloads. Further detail on assessment for each module is available in the module guides and module descriptors.

Students are expected to take charge of developing their own learning, through independent

research, reflection and further study. Students should use the time allocated for self-guided study to plan, critically analyse and reflect on their learning, undertake extensive further research through private study and engage in the library resources through wider reading. Students will be required to enhance their skills in time management, complex problem solving and self-motivation. By developing these skills as independent learners, it will allow for the enhancement of graduate skills and contribute towards future employability. Further detail is provided for each module via the support for guided independent study document.

The research project provides students with the opportunity to design and undertake an investigation in a topic that matches their interests, opportunities and abilities. Support will be given by the module leader and learning coaches through a system of lessons and supervisory meetings throughout the year. Clear guidelines, processes and assessment criteria will be provided, supported by a research project handbook.

Equality and diversity are fully embedded within the content and delivery of the course giving

an inclusive programme for the learner. Equality is a fundamental value of the teaching and learning, with all learners having the ability to demonstrate academic and practical strengths and develop further through support and self-directed study.

1. **Support for Students and their Learning**

Students are supported by:

* A personal tutor who is available to give support and guidance in relation to professional development, academic support and pastoral care via one-to-one tutorials, email, phone or Skype
* Module leader for each module studied
* Group tutorials to develop study skills and allow feedback
* Additional learner support (ALS) is available at the skills centre. Students are introduced to this department during induction and again during initial tutorials. This department extensively supports those students with a DSA.
* Comprehensive induction and handbook issued
* Guided Independent Learning document per module
* Research project handbook
* Learning Resource centre and induction to e-learning
* Moodle site for course specific material
* Student Staff Course Consultative meetings
* Students Union
* Peer mentors
* Careers Service supporting job application and CV development
* Mental health and student wellbeing team

The Personal Tutor Scheme (PTS) has been designed to enable us to give the best possible academic support and guidance to all of our students, and to ensure that they are able to access the wider services that the college provides. The role of the personal tutor and aims of the PTS:

* To build rapport between staff and students and contribute to personalising students’ experience at Merrist Wood
* To provide appropriate academic advice and guidance to students throughout their time at Merrist Wood by monitoring their progress and helping to identify individual needs
* To foster a close and engaged academic relationship with students and advise and refer students to other services as appropriate
* To help to develop students’ ability to be self-reliant and self-reflective and their ability to use feedback to best advantage
1. **Employability Statement**

This course provides an excellent grounding for onwards progression within the animal

science industries, be it working directly with animals or for an animal-related organisation. Potential employers for graduates include: veterinary and research laboratories such as the APHA and Pirbright Laboratories; stud yards; farms; nutrition companies; zoos and wildlife parks; aquariums; animal welfare organisations and charities; local and national authorities; educational establishments; and DEFRA. Furthermore, graduates could progress to further studies such as a Master’s degree.

Employability skills are embedded in the course throughout all modules, building on

professional development skills developed across earlier modules at levels 4 and 5, providing coherence and opportunities to develop graduate attributes. This is achieved through the range of different teaching, learning and assessment methods which relate theory to practice. To enable the development of employability skills, there is a strong emphasis on student’s individual professional, personal and academic development requirements. Throughout the tutorial programme students will be encouraged to pay particular focus in developing skills relevant to industry and to tailor their learning in-line with their career aspirations.

Modules will be supported by industry links and students will have the opportunity to work in some real-world situations in order for them to develop their professional working relationships outside of the taught curriculum. The range of learning activities included in this programme will enable students to create a portfolio of evidence to showcase their skills and attributes which will improve their employment prospects after graduation. Students may also wish to participate in the initiative to build networks with other students via a programme of seminars and master classes provided by current students, graduates and external contacts which will be of particular benefit in sharing specialist subject knowledge and experience.

1. **Approved Variants from the Undergraduate or Postgraduate Regulations**

There are no variants

1. **Other sources of information that you may wish to consult**

[*Merrist Wood course page*](https://moodle.guildford.ac.uk/)

[*Kingston University Policies and Regulations*](https://www.kingston.ac.uk/aboutkingstonuniversity/howtheuniversityworks/policiesandregulations/)

[*Subject benchmark statements*](http://www.qaa.ac.uk/quality-code/subject-benchmark-statements)

**Development of Field/Course Learning Outcomes in Modules**

This map identifies where the field/course learning outcomes are summatively assessed across the modules for this field/course. It provides an aid to academic staff in understanding how individual modules contribute to the field/course aims, a means to help students monitor their own learning, personal and professional development as the field/course progresses and a checklist for quality assurance purposes.

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| **Module code** | **Level 6** |
| SG6962 | SG6969 | SG6970 | SG6906 |
| **Knowledge & Understanding** | A1 |  | 🗸 | 🗸 | 🗸 |
| A2 | 🗸 | 🗸 | 🗸 |  |
| A3 | 🗸 | 🗸 | 🗸 | 🗸 |
| A4 |  | 🗸 | 🗸 |  |
| **Intellectual Skills** | B1 | 🗸 | 🗸 | 🗸 | 🗸 |
| B2 | 🗸 | 🗸 | 🗸 |  |
| B3 |  | 🗸 |  | 🗸 |
| B4 |  |  |  | 🗸 |
| **Practical Skills** | C1 |  | 🗸 |  | 🗸 |
| C2 |  |  | 🗸 | 🗸 |
| C3 | 🗸 |  |  | 🗸 |
| C4 |  |  |  | 🗸 |

**Students will be provided with formative assessment opportunities throughout the course to practise and develop their proficiency in the range of assessment methods utilised.**

**Assessment Calendar**

This table indicates the weeks that summative assessments will be published and when they will be due to be submitted or sat (exams).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Module Title** | **Assessment Element** | **Brief published** | **Submission Week** | **Feedback Week** |
| **Level 6** |
| Animal Cognition | 1 – Written Exam |  | 16/12/19 |  |
|  | 2 – Seminar | 16/09/19 | 24/02/20 | 23/03/20 |
|  | 3 – Report/Poster | 16/09/19 | 18/05/20 | 15/06/20 |
| Research Project | 1 - Project Proposal | 16/09/19 | 18/11/19 | 16/12/19 |
|  | 2 - Dissertation | 16/09/19 | 04/05/20 | 08/06/20 |
| Principles of Immunology and Parasitology | 1- Report | 16/09/19 | 11/05/20 | 15/06/20 |
|  | 2- Exam |  | 10/02/20 |  |
| Principles of Genetics, Reproduction and Breed Development | 1- Case Study | 16/09/19 | 27/01/20 | 02/03/20 |
|  | 2- Report | 16/09/19 | 27/04/20 | 01/06/20 |

Feedback will be provided within 20 working days. Further details can be found on the assessment calendar which also shows holiday and reading weeks.

**Technical Annex**

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| **Final Award(s) and Title(s):** | *BSc (Hons) Animal Science*  |
| **Intermediate Award(s):** | *BSc ordinary degree* |
| **Minimum period of registration:** | *1 year full-time, 2 years part-time* |
| **Maximum period of registration:** | *2 years full-time, 4 years part-time* |
| **FHEQ Level for the Final Award:** | *Honours degree level 6* |
| **QAA Subject Benchmark:** | *All subject benchmark statements can be found* [*here*](http://www.qaa.ac.uk/quality-code/subject-benchmark-statements)*. For PG provision where there is no QAA subject benchmark make reference to the* [*QAA Master’s Degree Characteristics*](http://www.qaa.ac.uk/quality-code/the-existing-uk-quality-code/part-a-setting-and-maintaining-academic-standards)*.* |
| **Degree Apprenticeship standard:** | *N/A* |
| **Modes of Delivery:** | *Full-time and Part-time* |
| **Language of Delivery:** | *English* |
| **Faculty:** | *Science, Engineering and Computing* |
| **School:** | *Life Sciences, Pharmacy and Chemistry* |
| **Department:** | *Applied and Human Sciences* |
| **UCAS Code:** | *SO23* |
| **Course/Route Code:** | *TBC* |
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