ROYAL AGRICULTURAL UNIVERSITY

CIRENCESTER COLLEGE

PROGRAMME SPECIFICATION

Foundation Degree in Animal Science

NB

The information contained in this document is intended only as a guide to the programme. It does not constitute a legally binding document or contract between the individual and the Royal Agricultural University.

The information contained herein is correct at the time of going to print, but the University reserves the right to make changes to the structure of the programme, assessment methods, etc. Any changes made however will be made known as soon as possible.

Programme Manager: Dr Anne Stevenson

1. Awarding institution	The Royal Agricultural University (RAU)
2. Teaching institution	The RAU and Cirencester College (CC)
3. Final award title(s)	Foundation Degree (FdSc) Animal Science
4. Academic level on Framework for Higher Education Qualifications (FHEQ)	Level 5
5. UCAS code(s)	AS1C
6. Relevant QAA Subject Benchmark Statement(s) and other reference points, e.g. FD qualification benchmark	This Foundation Degree has been developed with reference to the following reference points: The Framework for Higher Education Qualifications in England, Wales and Northern Ireland (QAA 2014) Subject Benchmark Statements – Biosciences (QAA 2015) Agriculture, horticulture, forestry, food and consumer sciences (QAA 2016) Foundation Degree Characteristics Statement (QAA 2015) QAA Education for sustainable development (2014)
7. Details of accreditation by a professional/statutory body	n/a
8. Mode of study	Full-time or part-time
9. Language of study	English

10. Date of production/revision	Revised document: May 2018

11. Educational aims of the programme

The FdSc Animal Science aims to:

- Develop the learner's interest, knowledge and understanding of animal science;
- Equip students with the practical and supervisory skills necessary to implement practical animal science activities;
- Promote employability through work-based learning, industry standard skills, and employer engagement;
- Develop academic skills to promote critical analysis of information and to propose solutions to challenges in the animal science sector;
- Facilitate a progression route for students who successfully complete this FdSc onto an appropriate BSc (Hons) conversion course at the RAU or elsewhere;
- Provide education and training delivering the appropriate knowledge and skills required for future employees of animal science and related sectors;
- Enable existing workers in the animal science sectors to pursue learning by part-time study, and to promote lifelong learning;
- Promote the acquisition of transferable skills to enable the learner to contribute effectively in an employment context;
- Foster flexibility and adaptability to respond to changes within the animal science sector.

12. Intended learning outcomes

12.1 Subject knowledge and understanding – students will be able to:

A1. Understand the fundamental concepts, principles and theories of animal biology.

A2. Demonstrate comprehensive and appropriate knowledge of animal science as applied to the health, welfare and husbandry of different species.

A3. Understand the issues involved with regard to the welfare, safety, and ethical and legal practices associated with different animal species within both natural and artificial habitats.

12.2 Intellectual / cognitive skills – students will be able to:

B1. Integrate and evaluate information from a variety of sources in order to gain a coherent understanding of theory and practice.

B2. Be creative in the solution of problems and in the development of research activity.

B3. Analyse and evaluate innovative approaches in animal science.

B4. Formulate and test hypotheses.

12.3 Professional practical skills – students will be able to:

C1. Undertake competent, safe, evaluative, reflective and effective practice.

C2. Analyse experimental results and determine their strength and validity.

C3. Act autonomously, with minimal supervision or direction, within agreed guidelines.

12.4 Transferable/ key skills: - students will be able to:

D1. Manage own roles, responsibilities and time; undertake personal and career development; utilise skills in new and changing situations and contexts.

D2. Relate to, and interact effectively with, individuals and groups, including working effectively as a team member.

D3. Communicate effectively using verbal and/or non-verbal means, including receiving, responding to, and presenting information in a variety of forms.

D4. Manage tasks and identify and solve problems using information sources.

D5. Apply numerical skills and techniques.

D6. Use a range of technological equipment and systems.

D7. Apply a range of skills and techniques, using a variety of thought processes, to develop creative solutions to problems.

13. Programme structure and requirements

13.1. Student workload

All full-time academic programmes at the RAU are constructed using a selection of modules, each of which requires engagement with a variety of learning activities. Successful completion of module assessments will result in

the award of credits, and students are required to achieve a total of 120 credits for each year of a full-time programme.

The credit system is used to ensure a balanced workload across each programme, with each credit point representing a notional learning time of 10 hours of student work. Thus a 15-credit module will require a notional input of 150 hours of work, and a complete academic year of 120 credits will require 1200 hours of work, or approximately 40 hours per week.

Within this total time, students can expect to participate in formal timetabled activities - such as lectures, seminars, tutorials, practicals and visits - for approximately one third of the total time: usually around 3 hours per week for a 15-credit module studied over a 15 week semester. Thus the majority of module activities - such as reading around the subject, preparing for tutorials and seminars, preparing for, and completing, module assessments and revision for, and sitting, examinations - will take place outside of these scheduled activities, but are an essential part of a student's learning journey.

Students attempting to short-cut their learning activities may find themselves experiencing difficulties as each module progresses, and as the level of assumed understanding increases. Thus it is vitally important that new students establish an effective routine for their studies as soon as possible. Maintaining a balanced workload from the start of the programme will help to avoid intense periods of activity, and ensure knowledge and understanding gradually develop throughout the year in readiness for any end-of-module examinations.

13.2. Length of Study Programme

Students registered full-time will complete the programme over two academic years (30 weeks per year), with the additional requirement of a compulsory work placement totalling a minimum of 30 days and completed either during the student's first academic year or during the summer vacation between year 1 and year 2. The objective of this period is to expose the students directly to relevant animal science and animal management activities within the sector.

Students who can already demonstrate suitable prior experience may seek exemption from this 30-day requirement, following agreement with the Programme Manager. However, they may not be exempted from the associated assessments for this period, which contribute to the Supervisory and Mentoring Skills module in the final year.

Part-time students will spread their studies over a longer period of time, up to a maximum of four academic years.

13.3. Detailed Modular Structure

The curriculum for the full-time route for the FdSc will consist of the following modules (with credits shown in brackets). The Module Reference Sheets are available on the University website.

Year 1 [Level 4 Modules]

1. Professional Skills [30 Credits]
2. Introductory Bioscience Laboratory Skills [15 Credits]
3. Fundamentals of Biology [15 Credits]
4. Animal Husbandry [15 Credits]
5. Animal Behaviour [15 Credits]
6. Wildlife Ecology & Survey [15 Credits]
7. Anatomy and Physiology [15 Credits]

Total for Year 1 = 120 Credits

On successful completion of 120 Credits at level 4, students leaving the programme will be awarded a Certificate of Higher Education.

Year 2 [Level 5 Modules]

8. Research Methods in Animal Science [15 Credits]
9. Supervisory Skills and Industry Placement [15 Credits]
10. Applied Bioscience Laboratory Skills [15 Credits]
11. Animal Nutrition [15 Credits]
12. Welfare Science, Ethics and Law [15 Credits]
13. Animal Health [15 Credits]
14. Genetics and Breeding [15 Credits]
15. Conservation Science Study Tour [15 Credits]

Total for Year 2 = 120 Credits

On successful completion of 240 credits, to include 120 at level 4 and 120 at level 5, students will be awarded a Foundation Degree in Animal Science.

13.4. Academic Level of the Programme

This Foundation Degree in Animal Science is a qualification in its own right, matched to the Intermediate level in the QAA “Framework for Higher Education Qualifications”. It is recognized as appropriate for graduate level recruitment for intermediate jobs by many employers.

This programme has been designed so that those successfully completing this Foundation Degree can undertake a period of further study, normally of one year’s duration, to achieve a BSc (Honours) Degree.

Examples of such programmes are the RAU’s BSc (Honours) Animal Science and Technology (*Subject to Validation*), BSc (Honours) Wildlife and

Countryside Management, BSc (Honours) Equine Studies, BSc (Honours) Agricultural Management.

The learning outcomes for this FdSc have been articulated with these Honours Degree Programmes so as to facilitate student progression.

13.5. Credits Relating to the Programme

The programme is in line with the Framework for Higher Education Qualifications in England, Wales and Northern Ireland (QAA 2014) and the Higher Education Credit Framework for England: Guidance on Academic Credit Arrangements in Higher Education in England (QAA 2008), as shown below:

QAA Level	Credits	Higher Education Award
Level 4	120	Certificate of Higher Education
Level 5	240*	Foundation Degree

* 120 @ level 4 + 120 @ level 5

13.6. Awards and Any Distinctive Features of the Programme

Successful completion of all modules will lead to the award of a Foundation Degree (FdSc) in Animal Science.

The programme has been developed following consultation with stakeholders interested in animal science and related industries.

The distinctive features of the programme are:

- The integrated nature of work-based learning activities, spanning both years of the programme
- The partnership between the RAU and Cirencester College to provide access to a wide range of staff expertise and educational resources
- The involvement of key stakeholders to ensure the programme meets the needs of employers and organisations involved in the animal science sector
- The ability to develop supervisory and mentoring skills relevant to the future management of staff and volunteers involved in animal-related industries
- The geographical location of the RAU and Cirencester College, providing easy access to a large number of excellent animal science, animal management and animal conservation resources locally. These include, as examples: Slimbridge Wildfowl and Wetlands Trust, Cotswold Wildlife Park, Cotswold Rare Breeds and Conservation Trust,

Vale Wildlife Hospital and Rescue Centre, Longleat Safari Park, Bristol Zoo

- Access to 80+ species in the Cirencester College Animal Centre and the RAU Farms
- An intensive Study Tour through which students can gain in-depth knowledge and practical skills relevant to animal science and conservation

14. Student support services

Academic Support Services Available to Students

Details of the range of support services provided for students are given in the RAU Student Handbook. In particular, for this programme, the following support services will be provided for students:

- A formal induction programme when students first arrive at University that will introduce them to all aspects of student life, including support services available, and outline the study skills they will need to complete their programme successfully
- The RAU Student Handbook that provides details of all facilities available to students.
- The programme specification and individual module guides that provide clear details of the assessment regulations and outline the teaching and assessment programme for each module of study.
- Personal Development Programmes will be agreed with students at the beginning of the programme and reviewed regularly
- On-line module teaching resources available through the University's VLE.
- Access to extensive Library and study skill packages, many of which are available on-line
- Student e-mail and internet facilities
- Personal access to all lecturing staff to enable students to discuss problems relating to specific modules or assessment activities
- A personal tutor
- Careers advice through sessions with Careers Guidance personnel
- Access to additional learning support services, such as dyslexia or disability support services
- Access to the Student Liaison Officer, the Student Welfare Officer and the University Health Centre
- Access to independent and confidential Cirencester Counselling services

15. Criteria for admissions

Applicants should confirm their ability to study on a Foundation Degree by presenting evidence of:

- 56 UCAS tariff, to include at least one A2 level pass or
- BTEC National Diploma (MM) or Diploma (MPP), or
- Advanced Diploma

Additionally candidates will normally be expected to present GCSE passes at Grade C or above in at least 3 other subjects which would normally include English and Mathematics

Applications from students with non-standard qualifications will be considered on an individual basis, and will include those presenting with:

- Learning through experience, demonstrated in portfolios or records of achievement and confirmed by employer reference(s), and/or by set learning tasks set at interview, or
- A combination of academic and experiential learning, to be considered on its individual merits.

Applicants should have sufficient motivation to benefit from the programme, based on an understanding of what is involved. Potentially suitable students may be interviewed so that their interest and motivation can be assessed. Non-standard admissions will be discussed with the Programme Manager and admissions office staff.

Accreditation of Prior Learning (APL)

The Programme Manager, in consultation with Registry Staff and following RAU policy, will make the admissions decision in cases involving APL and ensure that correct documentation is completed for all APL cases.

Accreditation of Prior Experiential Learning (APEL)

The Programme Manager will make the admissions decision in cases involving APEL, and ensure that students can show intellectual ability, by the submission of a work portfolio and the completion of appropriate coursework. This process will be in line with RAU policy.

Overseas Students

Applicants whose first language is not English must offer evidence of qualifications in written and spoken English. Acceptable qualifications are IELTS 6, or direct equivalents.

16. Teaching, learning and assessment

16.1. Programme Accessibility

This programme is inclusive of disabled people with particular regard to teaching, learning and assessment, in accordance with Part 10: Inclusive Practice of the University's Teaching Quality Handbook and the Equality Act 2010.

However, due to the particular requirements of this programme, students who are mobility impaired are advised to contact the University's Disability Officer to explore whether appropriate support or alternative assessment can be provided to enable successful completion of the programme.

All students are encouraged to disclose any impairment to the Disability Officer so that the appropriate support may be provided. Students have the right to request that the nature of their impairment be treated as confidential.

16.2. Personal Development Planning (PDP)

At the beginning of the programme, following any Accreditation of Prior Learning (APL) for a student, a PDP will be drawn up between the University and each student on the programme. This will confirm the student's learning and skills achievements to date as well as any Prior Accreditation that is being sought relating to any study modules in the Foundation Degree. Also any other learning outcomes a student may want to achieve through the Foundation Degree programme and any learning support required will be documented. Progress towards the achievement of these outcomes will be reviewed regularly.

16.3. Teaching, Learning and Assessment

The forms of teaching that will be employed for the delivery of this Foundation Degree are detailed below:

Lectures

One of the methods of delivery of learning during the University-based phases of the programme will be by lectures. Lecturers aim to:

- provide information
- encourage students to pursue additional information on subjects covered
- provide various views on subjects
- explain difficult ideas and issues relating to particular areas
- demonstrate ways in which students can widen and increase their depth of knowledge.

Seminars / Tutorials

These will provide opportunities for dialogues between students themselves as well as lecturers. Exchanges of information and ideas can be achieved under the direction of tutors in seminars/tutorials. Through these meetings students should be able to:

- express and share their views
- develop their ability to participate in group activities.

Visits

Visits to animal science, animal management and conservation enterprises will be an important part of the programme. These will aid the reinforcement and application of information learned through more formal study.

Work-based Experience

Students will gain work-based experience throughout this programme, through skills modules in both Year 1 and Year 2 and a 30-day work placement that may be completed either during the first academic year or during the summer vacation between Year 1 and Year 2.

Learning objectives for this period will be agreed between the learner, employer and University staff. During the work placement students should be able to:

- Work effectively in a 'professional' environment, individually or in teams
- Organise themselves as regards time management, resourcefulness and ability to work on their own
- Develop existing practical and business skills and acquire new ones
- Gain insight into the management of the enterprise including financial and human resource aspects.

Portfolio Development and Key Skills

During the programme students will be required to develop and maintain a portfolio relating to their work-based placement and work-related experiences. This will include developing their ability to demonstrate key skills such as numeracy, communications, presentation and IT skills.

Directed and Private Study

Students are expected to undertake additional study on their own behalf as an important learning method within the programme. This will normally involve reading to explore the breadth and depth of the syllabus, preparation of tutorial/seminar work, preparation of coursework, case study submissions and preparation of major projects. The use of the University and Cirencester College libraries, electronic journals and the RAU intranet resources which can be accessed remotely will be encouraged for the effective use of private study time.

Practical Experience

A particular feature of this programme will be learning time devoted to the gaining of practical skills. Students will be involved on the University farm or local field sites on a one-day per week basis during the academic year where they will be able to develop and enhance their practical skills and underpinning knowledge relating to working with different animal species.

Creativity and Innovation

An innovative and entrepreneurial approach is embedded throughout the programme (note particularly programme Learning outcomes B2, B3 & D7).

Sustainability

In accordance with RAU's Environmental & Sustainability Policy, sustainability is integral to the programme, underpinning the general approach and focused in specific modules.

Assessment

A wide range of assessment techniques will be applied throughout the programme to confirm learning outcomes. These will include:

- Formal (time constrained) examinations
- In-class tests
- Research reports
- Employer report on work placement
- Laboratory reports and Practical write-ups
- Essays
- Case studies
- Scientific posters
- Oral presentations
- Portfolios/appraisals
- Practical Skills Assessment

17. Work-based learning

Work-based learning (WBL) is a very important feature of this Foundation Degree.

Students will undertake training in work-based learning throughout the modular programme, specifically in the Professional Skills module at level 4 and in the Supervisory Skills and Industry Placement module at level 5. In addition a period of more formal work-based learning will be undertaken, either during the academic year of Year 1 or during the summer vacation between Year 1 and Year 2, totaling a minimum of 30 days. Assessment of this period will be linked to the Supervisory Skills and Industry Placement module at level 5.

At the end of the WBL, students are required to secure an assessment of their performance from their work-based supervisor(s), using either the RAU's or organisation's own appraisal form, to demonstrate successful completion and help inform the students' own Personal Development Plan.

Further details of the WBL activities is included in the WBL Handbook available on the University's VLE (Gateway).

In addition to the above, learning and assessment activities throughout the programme will further involve students in activities pertinent to future careers in the animal science sector.

18. Quality assurance procedures

The framework of policies and structures of the University, which form the basis for the assurance and continued development of quality standards for academic programmes, are set out in the Teaching Quality Handbook.

18.1. The Programme Management Team and Student Representation

A Programme Management Team will be appointed with the following membership:

- Programme Manager who will be Chair
- Centre Head for Agriculture
- A representative of Cirencester College staff
- Two student representatives from each programme year-group

The two student representatives will be elected at the beginning of each academic year and will serve for a minimum period of one year. Their prime function will be to bring a student's perspective to the deliberations of the Programme Management Team (PMT) and feedback on the progress of the programme.

The team will normally meet at least twice a year and its function will include discussion of general issues relating to teaching, learning resources, curriculum and careers guidance, and to ensure the programme provision aligns with the Framework for Higher Education Qualifications (FHEQ) and recognises and adheres to the expectations of the Quality Assurance Agency (QAA) Quality Code in terms of academic quality and standards.

18.2. Methods for evaluating and improving the quality and standards of teaching and learning

The Programme Management Team undertake a range of activities to ensure the quality and standards relating to the teaching, learning, assessment, and outcome standards are continually reviewed and improved. Mechanisms for review and evaluation of the programme include:

- Preparation of annual module reviews by module leaders to identify areas of good practice and consider further development of each module in the programme.
- Regular Programme Management Team meetings.
- Submission of annual reports by External Examiners, commenting on the quality and standards of the programme.
- Preparation of an annual programme report by the Programme Manager and considered by the University Academic Quality and Standards Committee.
- Periodic review and revalidation of the programme on a five year cycle, involving external panel members.

18.3. Committees with responsibility for monitoring and evaluating quality and standards:

- Programme Committee (including student representation).
- University Academic Quality and Standards Committee (AQSC).
- University Examination Boards (to consider marks, progression and awards).

18.4. Mechanisms for gaining student feedback on the quality of teaching and their learning experience:

- Student representation at the Programme Committee.
- Student feedback on modules and programme.
- Annual Student Satisfaction Survey (SSS)
- Final year undergraduates – National Student Survey (NSS)

18.5. Staff development priorities include:

- Institutional staff development courses.
- Attainment by all staff of formal teaching qualification.

18.6. Stakeholder feedback

Feedback from existing and past students, employers, External Examiners and the Subject Advisory Boards are regularly received and considered in the annual and periodic review process.

19. Marking guides and assessment regulations

The marking guide for student assignments and for examinations is given in Appendix 2. University Regulations for Assessment and Progression are to be found on the University website:
https://www.rau.ac.uk/about/organisation/public-information/academic-information/academic-policies-and-procedures

20. Ownership of programme specification

The responsibility for this Foundation Degree will lie primarily with the RAU Centre of Agriculture.

21. Curriculum map

The curriculum map for this programme, showing where the programme outcomes are assessed within the modular programme, is shown in Appendix 1.

22. Career prospects

Career opportunities available to those completing this Foundation Degree would include:

- Laboratory Technician
- Animal Nutritionist
- Animal Conservation bodies
- Wildlife parks, zoos, natural history collections and botanical gardens.
- Wildlife management enterprises e.g. deer management
- Farms
- Animal Welfare Officer
- Self-employment

23. Further information

This Programme Specification document is designed to be a concise summary of the main features of the Foundation Degree in Animal Science. More detailed information about the programme modules is available in the individual module handbooks and web-sites available from the University's VLE (Gateway).

The 'Student One Stop Shop' found on the Intranet contains information on the following:

- The Student Handbook
- General academic assessment rules
- Blank mitigating circumstances forms and current rules
- Dissertation guidance forms
- Past exam papers

The Student Handbook includes details of the University's Equal Opportunities and Disabilities statements and the details of the learning resources available to students.

24. Module reference sheets

The modules contributing to this Foundation Degree include:

Year 1 [Level 4 Modules]

1. Professional Skills [30 Credits]
2. Introductory Bioscience Laboratory Skills [15 Credits]
3. Fundamentals of Biology [15 Credits]
4. Animal Husbandry [15 Credits]
5. Animal Behaviour [15 Credits]
6. Wildlife Ecology & Survey [15 Credits]
7. Anatomy and Physiology [15 Credits]

Year 2 [Level 5 Modules]

8. Research Methods in Animal Science [15 Credits]
9. Supervisory Skills and Industry Placement [15 Credits]
10. Applied Bioscience Laboratory Skills [15 Credits]
11. Animal Nutrition [15 Credits]
12. Welfare Science, Ethics and Law [15 Credits]
13. Animal Health [15 Credits]
14. Genetics and Breeding [15 Credits]
15. Conservation Science Study Tour [15 Credits]

The Module Reference Sheets are available on the University Intranet and website. Please follow the link to:
https://www.rau.ac.uk/about/organisation/public-information/academic-policies/module-details

Appendix 1A: FdSc Animal Science Curriculum Map: Level 4

Learning Outcomes	Professional Skills	Introductory Bioscience Lab Skills	Fundamentals of Biology	Animal Husbandry	Animal Behaviour	Wildlife Ecology & Survey	Anatomy & Physiology
Subject Knowledge and Understanding							
A1		X	X		X		X
A2				X	X	X	
A3				X		X	
Intellectual / Cognitive Skills							
B1	X	X	X	X	X	X	
B2					X	X	
B3				X			
B4		X					
Professional Practical Skills							
C1	X	X		X	X	X	
C2		X				X	
C3	X	X				X	
Transferable / Key Skills							
D1	X	X				X	
D2	X	X				X	
D3	X	X	X	X	X	X	X
D4	X	X		X		X	X
D5		X	X			X	
D6	X	X				X	
D7				X			

Appendix 1B: FdSc Animal Science: Curriculum Map: Level 5

Learning Outcomes	Research Methods in Animal Science	Supervisory & Mentoring Skills	Applied Bioscience Laboratory Skills	Animal Nutrition	Welfare Science, Ethics and Law	Animal Health	Genetics & Breeding	Conservation Science Field Trip
Subject Knowledge and Understanding								
A1	X		X	X	X	X	X	X
A2				X	X	X		X
A3		X	X		X		X	X
Intellectual / Cognitive Skills								
B1	X	X	X	X	X	X	X	X
B2	X		X					X
B3	X		X					X
B4	X		X					X
Professional Practical Skills								
C1	X	X	X	X				X
C2	X		X					X
C3	X	X	X					X
Transferable / Key Skills								
D1	X	X	X					X
D2	X	X	X	X			X	X
D3	X	X	X	X	X	X	X	X
D4	X	X	X				X	X
D5	X		X	X				X
D6	X		X	X		X		
D7	X	X	X					X