BSc (Hons) Animal Science (C305)
Supplement to the
Undergraduate handbook

Degree Programme Information
ACADEMIC YEAR 2019-2020
Welcome again,

... to BSc Animal Science at Newcastle University! As students of Animal Science you have the best of both worlds: we are a friendly, small community of staff and students, with all the benefits that a large university like Newcastle University with a range of degree programmes and services has to offer. Plus, we are in the heart of a wonderful compact city and surrounding countryside.

Congratulations, you did it! You achieved the qualifications to get here, therefore you have the ability to succeed! Now it is up to you to do yourself proud, take advantage of all the opportunities and support available to you during your time with us to get an excellent degree and position yourself for an interesting and fulfilling career. Do be an active part of your education, not just to improve your student experience over these years, but it will enhance your prospects in the employment market, for example, become a student rep. We value your input, and listen to the student voice.

The Higher Education Academy (a club for good lecturers, I suppose) have published some research with students in the BioSciences (similar degrees to that you have chosen) which asked what advice those students would give to students at Stage 1 to help them succeed. It may seem obvious, but I share it with you here to help give you the best start on your journey.

- Go to all your lectures, practicals, tutorials, seminars...
- If you don’t understand something from a lecture or practical, ask questions. Lecturers and demonstrators are happy to help; [discuss with your other students, you are a great support to each other]
- What you hear about in lectures and practicals isn’t everything you need to know, you will have to read around and journal papers are the best source of up-to-date information;
- Respect deadlines, don’t lose marks for no reason by handing in work late;
- Read your practical schedules before you arrive at the session - you’ll get a lot more out of it; Experiments don’t always work, that’s the nature of science - don’t get disheartened by it;
- Work experience is a good thing, not only for your CV and bank account, but also to get you thinking about what you want to do next;
- Visit the library, not only could it save you money, by borrowing rather than buying textbooks, but it can be a great place to work;
- Take time out to relax, especially when you’re revising for exams; and
- It isn’t just about work! Enjoy the opportunities to do new things and meet new people.

(Higher Education Academy, UK Centre for Bioscience, 2015)
I hope the following degree specific pages are helpful. They outline what we aim for you to cover in Animal Science, the skills you will hone and how the degree is structured. They also signpost where to go for further information and support.

I look forward to getting to know you over the course of the next 3 or 4 years and wish you every success with your studies

**Dr Catherine Douglas**

*I am your Degree Programme Director. While your personal tutor is there as your first point of contact for enquiries (after you have scrutinised the school handbook and this supplement), I am here to give guidance on academic issues in relation to your degree. Supported by the wider team, I also oversee the quality processes to ensure your learning experience is optimised and we produce well-rounded Animal Science graduates, with a range of skills and knowledge, which is highly sought after by employers in the varied Animal Science sector and more generally. Much of this goes on behind the scenes, but for any of you who are Student reps attending the Student Staff Committee, we will see much of each other as we liaise and collectively strive to make your time here the best we all can. I also have the pleasure of seeing you in some of our tutorials where we get together as an Animal Science cohort.*

Reference

Aims and Objectives

Aims

We aim to provide you with a detailed understanding of the subject of Animal Science. This includes the relationship of predominantly domestic animals to the wider environment such as the use of animals for food production in the context of global food security and as pets and companion animals, also animals in zoos and wildlife parks. The range of optional modules are designed to provide a more specialised treatment of particular areas of animal science relating to farm and companion animals and the disciplines of physiology, nutrition, reproduction, behaviour, health and welfare.

We aim to provide a broad, up-to-date, stimulating and challenging (in a good way) degree programme to prepare graduates for a career in animal science in the varied context of animal production, companion animals and wider disciplines.

Our course is based on modern experimental science and we actively encourage the development of your skills in critical analysis, inductive reasoning, experimental procedure and lateral synthesis.

Our graduates should be able to plan and conduct independent experimental investigations. They should also, as a result of their training, be able to report the results of an investigation accurately, draw appropriate conclusions and make recommendations.

We will encourage you in the development of your knowledge and skills throughout your degree programme, but the initiative and responsibility rests with you.

In addition, your degree will provide opportunities to develop and enhance personal qualities such as self-motivation, efficiency, responsibility, reliability, resilience, judgement, maturity, tolerance, co-operation, intellectual rigour and honesty. These qualities and key skills are transferable to many careers and are highly sought after by employers.

We work closely with many different animal sectors to offer regular visits to bring your studies to life by providing excellent practical insights to the science which underpins the degree. You can also enhance your employability by undertaking voluntary or paid work experience, in your own time, during the summer vacation or undertaking a placement year.

Your University programme is primarily intended to educate you in a particular discipline, but it will also provide training in transferable skills and personal development. The University maps these skills according to the Graduate Skills Framework (http://www.ncl.ac.uk/quilt/assets/documents/str-gsf-framework.pdf).

Each of your modules will be clearly linked to a series of graduate skills, some of which will be present in the learning and teaching activities and some of which will be assessed. You will be able to identify which skills are present in each module by looking at the module catalogue entry (http://www.ncl.ac.uk/module-catalogue/modules.php). Identifying the skills present in each module that you take will help you to recognise key skills that you can mention in interviews and on your CV.
Objectives

Factual Knowledge
In lectures, tutorials, seminars, practicals and field classes, lecturers will present you with large amounts of conceptual knowledge and factual information relevant to Animal Science. You will also be directed to textbooks, research literature, and web pages for further study. See the general marking criteria in the school handbook which indicates the level of additional “reading and thought” required to achieve the higher grades.

As a science graduate, you must be knowledgeable in your subject and fluent in its technical language and terminology. You cannot hope to impress prospective employers if you do not have a high level of knowledge about your subject. In biological sciences, you must become accustomed to using the scientific (Latin) names of relevant organisms. This is increasingly important as science becomes ever more international through easier communication across the world.

Factual knowledge is easier to acquire if your motivation towards the subject is high. Many of our students already have this vocational interest, and from an early age knew that they wanted to pursue a career working with animals. It is important, therefore, to choose the optional modules and a Stage 3 dissertation topic which most closely match your interests.

It is impossible to define the extent of the factual knowledge you will have acquired by the time you graduate. Much will depend on your own capacity to learn and the amount of extra reading beyond lecture material that you undertake. You can be sure, however, that you will receive all the encouragement and guidance that your lecturers can provide and that the knowledge presented to you will be relevant, accurate and up-to-date. The published Module Outlines, which are available on the University webpage and are often summarized in the ‘Module Information’ part of Blackboard, will give you an idea of the boundaries of knowledge imparted in each module. Within those boundaries it is very much up to you how much knowledge you acquire.

Skills and Techniques
In addition to the key skills mentioned above, you will acquire scientific skills appropriate to Animal Science. These skills are too numerous to list exhaustively and will vary from graduate to graduate depending on the optional modules you select.

In general you will acquire a range of laboratory and field-based skills appropriate to Animal Science, together with skills in data handling, statistical analysis and technical reporting.

New methods and techniques are constantly being developed in research in the area of Animal Science. As your lecturers are also active research workers in their chosen fields, they will be able to keep you up-to-date in this respect. However, do not expect to get hands-on experience of every technique mentioned in lectures. For various reasons (e.g. licensing, expense, value of equipment) this may not always be possible.

Other transferable skills not previously mentioned include essay writing, oral presentation of reports, and the use of computers for analysis of data and word processing. As you might expect, basic skills and techniques, including skills needed for the transition to Higher Education, such as referencing are introduced in the earlier stages of your course and more advanced skills are developed at later stages.
Concepts and Ideas
By the end of Stage 3, you should be familiar with the major concepts and ideas currently important in Animal Science. You will also have acquired a breadth of knowledge, skills and techniques and have been encouraged by your lecturers to pursue the frontiers of knowledge and understanding of the various disciplines that make up the subject of Animal Science.

Intellectual Development
By the end of your Animal Science course, the level of intellectual development achieved will vary from one student to the next. Thus the extent to which individuals have assimilated the factual knowledge, practical skills and techniques, and understood the concepts and ideas presented to them will differ from one individual to the next. We must assess your intellectual development and in this connection we will rank you according to your understanding and knowledge of the subject as taught, the extent to which you have studied the subject, your ability to think critically, analytically and synthetically, and your ability to communicate in your subject, both in writing and orally.

The extent to which you have developed these intellectual skills will determine the class of degree you are awarded. You are encouraged to become familiar with the marking criteria used throughout the University to assess coursework and written examinations (refer to the School Handbook, section 4.6.1).

You have the opportunity to undertake a year’s placement, if you wish to do this you will have to change onto the appropriate degree code listed below in Stage 2. More information regarding University placements and your responsibilities can be found here: https://internal.ncl.ac.uk/placements/

Outcomes of the Animal Science degree
By the end of your studies you should:

- have gained a detailed knowledge and understanding of the subject of Animal Science;
- have gained a thorough knowledge of the application of animal science to different contexts, from the use of animals in food production and global food security to their roles in sport, companionship and conservation;
- be able to think analytically, critically and synthetically;
- be able to gather relevant data from the literature, analyse and interpret it;
- be able to understand, appreciate and criticise primary research literature;
- be able to conduct an independent scientific investigation, and report, analyse and interpret the results in relation to relevant literature;
- be competent in communicating facts, results and ideas, both in written essays and reports, and in verbal presentations to large and small groups;
- be proficient in teamwork, and capable of building effective relationships in both large and small groups to achieve the common goal of the team;
- be creative, adaptable and able to use your initiative
- have developed your personal qualities including the ability to work independently, manage time effectively, be creative, adaptable and able to use your initiative.
Programme specification and regulations

Details of your programme specification and regulations are available on the University website at: [http://www.ncl.ac.uk/regulations/programme/2019-2020/sciences.php](http://www.ncl.ac.uk/regulations/programme/2019-2020/sciences.php). The listing of modules is also provided towards the end of this supplement. In addition, you can find more detailed information on individual modules through the module catalogue: [http://www.ncl.ac.uk/module-catalogue/](http://www.ncl.ac.uk/module-catalogue/).
DEGREE PROGRAMME ADMINISTRATION

Finding help when you need it

Dr Catherine Douglas is the Degree Programme Director for BSc Animal Science, supported by Mrs Louise Hall and Miss Jess Chapman Teaching and Learning Administrator and Assistant for the Animal Science and Agriculture degrees. You can approach either of us for any assistance that you might need.

Both Jess and Louise can be contacted by email (snes.aessc.support@ncl.ac.uk) or 0191 208 6623 and are available most days in the SNES, Agriculture Building Office, located on the ground floor of the Agriculture Building, and can usually able to deal with minor issues on the spot. For queries relating to specific modules, in the first instance, she might well refer you to the member of staff responsible for that module (i.e. Module Leader). For other queries, please email Dr Catherine Douglas (Catherine.douglas@ncl.ac.uk). Email is best in the first instance as she is part-time 10am-2pm Monday to Friday, but has lectures, tutorials and meetings, so it is best to email first. It may be that an enquiry can quickly be answered by email, or you can arrange a mutually convenient time to meet. Her office is room 4.04 (on the fourth floor of the Agriculture Building).

We will endeavour to respond to your query as soon as possible, but please note that in busy periods the volume of emails is such that it might take 48 hours for a response.

Our advice is always that, if your query is urgent, then please come and speak to a member of staff in the School Office, either Sarah or one of her colleagues, who will be able to help you or will be able to find another member of staff who can give you the help you need.

The Animal Science degree is taught by a number of different staff from the School of Natural and Environmental Science, as shown in the table below, as well as other specialist staff from across the University, e.g. the Careers Service who will provide you with their contact details when you see them in lectures/practicals.

<table>
<thead>
<tr>
<th>Name</th>
<th>Role in Animal Science</th>
<th>Email</th>
<th>Agriculture Building Office No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Catherine Douglas</td>
<td>Degree Programme Director</td>
<td><a href="mailto:catherine.douglas@ncl.ac.uk">catherine.douglas@ncl.ac.uk</a></td>
<td>4.04</td>
</tr>
<tr>
<td>Mrs Helen Adamson</td>
<td>Module Leader</td>
<td><a href="mailto:helen.adamson@ncl.ac.uk">helen.adamson@ncl.ac.uk</a></td>
<td>4.20</td>
</tr>
<tr>
<td>Dr Andrew Beard</td>
<td>Module Leader</td>
<td><a href="mailto:andrew.beard@ncl.ac.uk">andrew.beard@ncl.ac.uk</a></td>
<td>4.04b</td>
</tr>
<tr>
<td>Dr Abdul Chaudhry</td>
<td>Module Leader</td>
<td><a href="mailto:abdul.chaudhry@ncl.ac.uk">abdul.chaudhry@ncl.ac.uk</a></td>
<td>7.16</td>
</tr>
<tr>
<td>Mr Karl Christensen</td>
<td>Module Leader</td>
<td><a href="mailto:karl.christensen@ncl.ac.uk">karl.christensen@ncl.ac.uk</a></td>
<td>6.06</td>
</tr>
<tr>
<td>Dr Jonathan Guy</td>
<td>Module Leader</td>
<td><a href="mailto:jonathan.guy@ncl.ac.uk">jonathan.guy@ncl.ac.uk</a></td>
<td>4.08</td>
</tr>
<tr>
<td>Prof. Ilias Kyriazakis</td>
<td>Module Leader</td>
<td><a href="mailto:Ilias.kyriazakis@ncl.ac.uk">Ilias.kyriazakis@ncl.ac.uk</a></td>
<td>7.17</td>
</tr>
<tr>
<td>Dr Matthew Leach</td>
<td>Module Leader</td>
<td><a href="mailto:matthew.leach@ncl.ac.uk">matthew.leach@ncl.ac.uk</a></td>
<td>7.14</td>
</tr>
<tr>
<td>Dr Helen Mason</td>
<td>Module Leader</td>
<td><a href="mailto:helen.mason2@ncl.ac.uk">helen.mason2@ncl.ac.uk</a></td>
<td>3.22</td>
</tr>
<tr>
<td>Mr Simon Parker</td>
<td>Module Leader</td>
<td><a href="mailto:Simon.parker@ncl.ac.uk">Simon.parker@ncl.ac.uk</a></td>
<td>4.20</td>
</tr>
<tr>
<td>Dr Miguel Velazquez</td>
<td>Lecturer</td>
<td><a href="mailto:miguel.velazquez@ncl.ac.uk">miguel.velazquez@ncl.ac.uk</a></td>
<td>3.06</td>
</tr>
<tr>
<td>Mrs Louise Hall</td>
<td>Learning &amp; Teaching Admin</td>
<td><a href="mailto:snes.aessc.support@ncl.ac.uk">snes.aessc.support@ncl.ac.uk</a></td>
<td>2nd Floor</td>
</tr>
<tr>
<td>Miss Jess Chapman</td>
<td>Learning &amp; Teaching Assistant</td>
<td><a href="mailto:snes.aessc.support@ncl.ac.uk">snes.aessc.support@ncl.ac.uk</a></td>
<td>Reception</td>
</tr>
</tbody>
</table>
External Examiner for BSc Animal Science

As part of the University’s Quality Assurance process, every degree programme is subject to an annual inspection by an external assessor who is usually a lecturer in the same discipline but at a different University somewhere in the UK. For BSc Animal Science, our erstwhile External Examiner has served his term and we are in the process of recruiting his successor. You will be updated with this information when it becomes available.
BSc Animal Science

Summary of Programme Commitments

The University’s Student Charter is available on the internet at https://www.ncl.ac.uk/pre-arrival/regulations/#studentcharter. It is also provided to all students as part of the Student Guide. In the Student Charter, the University undertakes to provide you with access to ‘high standards of teaching, support, advice and guidance’.

The Student Charter requires that students are provided with a ‘programme handbook which details any professional requirements, contact hours, mode of course delivery, assessment criteria, examination arrangements and regulations, academic guidance and support, and appeals and complaints procedures’. The purpose of this Summary is to help you locate further details about this key information in your School Handbook.

Your School Handbook also contains a range of other valuable information, so you should read it thoroughly and retain a copy for future reference.

Your attention is also drawn to the Student Charter Supplementary Statement of Student Rights and Responsibilities. Further information on this can be found at https://www.ncl.ac.uk/media/wwwnclacuk/pre-arrival/files/Student%20Charter%20for%202018.pdf

<table>
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<tr>
<th>Average number of contact hours for this stage / programme:</th>
<th>11 per week</th>
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<tbody>
<tr>
<td>Stage 1: 25 hours</td>
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<tr>
<td>Stage 2: 20 hours</td>
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<tr>
<td>Stage 3: 15 hours</td>
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</tr>
<tr>
<td>Mode of delivery:</td>
<td>Lectures, tutorials, seminars, practicals, field trips, computer-based practicals</td>
</tr>
<tr>
<td>Normal notice period for changes to the timetable, including rescheduled classes:</td>
<td>See page 5 in the School Handbook</td>
</tr>
<tr>
<td>Normal notice period for changes to the curriculum or assessment:</td>
<td>Detailed in the module outline form and not normally changed throughout the year. In exceptional circumstances a change could be suggested by the module leader but students will be consulted for opinion.</td>
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<tr>
<td>Normal deadline for feedback on submitted work (coursework):</td>
<td>See page 19 in the School Handbook</td>
</tr>
<tr>
<td>Normal deadline for feedback on examinations:</td>
<td>See page 19 in the School Handbook</td>
</tr>
<tr>
<td>Professional Accreditation:</td>
<td>N/A Although we do encourage you to become a student member of the British Society for Animal Science (free to students) <a href="http://bsas.org.uk/">http://bsas.org.uk/</a></td>
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<tr>
<td>Assessment methods and criteria:</td>
<td>Assessment methods will vary per module and may include dissertation, practicals, written work, group projects and presentations, also see section 4 in the handbook for more details about assessment and marking criteria.</td>
</tr>
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<td>Academic guidance and support:</td>
<td>See Section 2 in the School Handbook</td>
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