

PROGRAMME SPECIFICATON

1	Awarding body
	Glyndŵr University
2	Teaching institution
	Glyndŵr University
3	Award title
	FdSc Animal Studies BSc (Hons) Animal Studies (top up) BSc (Hons) Animal Science
4	Final awards available
	FdSc Animal Studies Cert HE Animal Studies BSc (Hons) Animal Studies (top up) BSc (Ord) Animal Studies (top up) BSc (Hons) Animal Science BSc (Ord) Animal Science Cert HE Animal Science Dip HE Animal Science
5	Professional, Statutory or Regulatory Body (PSRB) accreditation
	Please list any PSRBs associated with the proposal
	Royal Society of Biology (RSB)
	Accreditation available
	It is the intention that RSB degree accreditation for BSc (Hons) Animal Science will be sought after one academic year of delivery.
	Please add details of any conditions that may affect accreditation (eg is it dependent on choices made by a student?)
	BSc (Hons) Animal Science programme only
6	JACS3 code
7	UCAS code
	FdSc Animal Studies with Foundation Year: 85D4 FdSc Animal Studies: D300 BSc (Hons) Animal Studies (top up): D301 BSc (Hons) Animal Science: 839K
8	Relevant QAA subject benchmark statement/s

QAA Biosciences, Agriculture, Horticulture, Forestry, Food and Consumer Sciences (2016)

9 Other external and internal reference points used to inform the programme outcomes

The Sector Skills Council for Land-based Industries (LANTRA)
Employers
Students
External Examiner
Industry professionals

10 Mode of study

Full & part time

11 Language of study

English

Office use only

Date of validation event: 31 March 2017
Date of approval by Academic Board: 09 June 2017
Date of revision: *Enter the date of any subsequent revisions*
Date of revision: *Enter the date of any subsequent revisions*

12 Criteria for admission to the programme

Standard entry criteria

The University's admissions policy is detailed here
<https://www.glyndwr.ac.uk/en/Howtoapply/Admissionspolicies/>.

Foundation Year: by interview
Foundation Degree: 48 UCAS points
BSc (Hons) Degree: 112 UCAS points

UK entry qualifications

The University's entry requirements are set out at
<http://www.glyndwr.ac.uk/en/Undergraduatecourses/UCASstariffchange2017/>

International entry qualifications

Qualifications outlined on the National Academic Recognition and Information Centre (NARIC) as equivalent to the above UK entry qualification.

Programme specific requirements

An animal background is required. This may be achieved from work experience in the animal sector, and/or from an informal means such as breeding or keeping animals for leisure purposes. A science based qualification is required for the BSc (Hons) Animal Science programme.

The BSc (Hons) Animal Studies top-up programme forms a progression route for students who have completed the FdSc Animal studies at Glyndŵr University and for students who have completed HND, FdSc or Dip HE (240 credits) in a related subject at other institutions.

Non-standard entry criteria (e.g. industry experience)

Applicants with non-standard entry criteria may be invited to interview.

UCAS points may be counted from a variety of qualifications such as:
Welsh / International & European Baccalaureates
BTEC/EDEXCEL National Diplomas / Certificates
Scottish Advanced Higher level qualifications
A levels

Industry relevant experience will also be considered and will be discussed at interview. Students without the relevant qualifications or experience will be directed towards the FdSc Animal Studies with Foundation Year.

English language requirements

The University's English language requirements are set out at
<http://www.glyndwr.ac.uk/en/Howtoapply/Readytoapply/>

✓ Undergraduate

In addition to the academic entry requirements, all applicants whose first language is not English or Welsh must demonstrate English language proficiency.

European students are able to provide this evidence in a number of ways (please see <http://www.glyndwr.ac.uk/en/Europeanstudents/entryrequirements/> for details), including IELTS, with an overall score of 6.0 and no component below 5.5.

International students require a UKVI Approved Secure English Language Test (SELT), achieving an overall score of 6.0 with no component below 5.5 (please see <http://www.glyndwr.ac.uk/en/Internationalstudents/EntryandEnglishLanguageRequirements/> for details). If arranging a test, applicants must ensure they book an 'IELTS for UKVI' test. For further information see: <http://takeielts.britishcouncil.org/ielts-ukvi/book-ielts-ukvi>. Applicants are asked to note that only an *IELTS for UKVI* test result will be accepted.

13 Recognition of Prior (Experiential) Learning

Programme specific requirements

Applicants may enter the programme at various levels with Recognition of Prior Learning (RPL) or Recognition of Prior Experiential learning (RPEL) in accordance with the University General Regulations.

14 Aims of the programme

FdSc Animal Studies

1. To produce graduates with the knowledge and practical skills essential for them to operate effectively in the Animal Care sector.
2. To equip students with the critical understanding of the core concepts that underpin Animal Husbandry, Behaviour, Science, Health and Welfare.
3. To develop the qualities and transferable skills necessary for employment and/or progression to other qualifications by integrating theoretical and practical knowledge and applying this to the work context

BSc (Hons) Top-up Animal Studies

1. Demonstrate competency with a wide range of Animal Studies theories and principles as well as an awareness of the current boundaries of theory and applied knowledge;
2. Understand the provisional nature of researched information and evaluate the implication of the contested and transient nature of such material;
3. Address issues through the collection, collation, analysis and evaluation of appropriate qualitative and quantitative information and using it to formulate solutions;
4. Plan and execute research or development work and evaluate the outcomes and draw logical conclusions;
5. Demonstrate awareness of legal, moral, ethical and social issues relevant to the Animal sector.

BSc (Hons) Animal Science

1. To provide students with a detailed understanding of animal science, management of animals, their behaviour, welfare and conservation in combination with an awareness of current limits of theory and applied knowledge.
2. To enable students to analyse and evaluate researched information, and allow for competing and alternative explanations within the subject area.
3. To enable students to demonstrate the relevant intellectual, practical and transferable skills in preparation for careers and further study in the animal sector.
4. To develop skills of analysis and enquiry in tackling problems by collecting, and evaluating appropriate qualitative and quantitative information, making decisions, and suggesting solutions.

15 Distinctive features of the programme

FdSc and BSc (Hons) Animal Studies

The programmes have been shaped by national and international interest and concern for animal behaviour and welfare. As with many land-based industries, the Animal industry is influenced by several external forces. The Animal Welfare Act 2006, EU legislation, revision of the Veterinary Surgeons act and climate change have been identified as key drivers for change in the industry. Therefore demand is increasing for highly skilled workers in the industry to drive up standards of animal welfare and enable businesses to comply with codes of practice and legislation. In addition to this, higher level skills and knowledge are required to ensure the maintenance of biodiversity, sustainability and disease control (Lantra, 2009). The Animal Studies programmes play a part within these sector-specific developments. Being non-specialist programmes i.e. not focusing on a particular species or niche area, they can support people entering into a variety of roles within the sector. The Sector Skills Council for Land-based Industries (Lantra) is the leading organisation supporting Land-based industries, including the Animal Care Industry. Sector research by Lantra (2005) has identified the need for people working in the Animal Care industry to have greater access to training at advanced level. Research demonstrates that employers expect graduates to have advanced skills in the following areas:

- Animal handling
- Animal health and welfare (including identifying diseases)
- Animal nutrition and exercise
- Restraining animals
- Basic animal first aid
- Transporting animals
- Providing information and advice to customers
- Communication

The programmes provide a balanced package of skills and knowledge, tailored for those wishing to enter a profession attached to the Animal Care sector, or simply wanting to obtain higher level education and enter a different career path.

Many of the skills delivered on the programme (some with further specialist training) will enable students to pursue careers in several different sectors. Students will be made aware of relevant professional bodies such as the Association for the Study of

Animal Behaviour, Institute of Ecology and Environmental Management and the Association of Pet Dog Trainers.

The programmes provide a progression route for students who have completed animal related qualifications at FE Colleges. The FdSc Animal Studies course is particularly popular with students studying at Coleg Cambria on the shared campus at Northop. The FdSc course enables these students to progress their studies without having to move away from home. This programme therefore serves to strengthen the collaboration between Glyndŵr University and Coleg Cambria.

Progression from the FdSc Animal Studies includes access to the BSc (Hons) Animal Studies Top up Degree Programme and similar courses at other institutions (subject to their admissions policies) or employment. Students moving into employment have progressed to careers within the animal industry such as, welfare centre managers, zoo keepers or careers allied to the industry, for example research and consultancy work. These opportunities exist at a local level, but are more likely to be available nationally or internationally. Locally, there are a number of small animal welfare charities, and local councils employ animal welfare officers. There are also a number of animal businesses both within the county, and over the border in England.

The majority of careers within the industry require 'well-rounded' graduates with theoretical and practical knowledge of a variety of aspects of the industry, and an array of transferable and vocational skills. This programme aims to produce graduates with the broad knowledge and skills relevant to a career in the Animal Care sector, but the transferable skills developed could be applicable to other career paths.

The graduates from this programme are needed by industry both in Wales and the rest of the UK. Employment, across the sectors comprising the Animal Care industry, offers graduates significant choice in a chosen career path including:

Veterinary Nursing*	Rescue and Rehabilitation	Research	Animal Behaviourist
Environmental Health officer	Education	Ecologist	Wildlife officer
Zoo keeper	Conservationist	Pet shop manager	Sales and Marketing
Animal Charity worker	Nutritional advisor	Animal technician	Self-Employment
Kennel and cattery management	Animal Trainer	Animal Collection Demonstrator	Education Officer

*Additional BVNA qualification needed for professional recognition

The programmes will also continue the excellent partnership arrangements that currently exist with animal organisations and businesses within the region. Examples of these include the Welsh Mountain Zoo in Colwyn Bay, Ty Mawr Country Park outside Wrexham, Loggerheads Country Park in Denbighshire, The North Wales Wildlife Trust based in Mold, Wagtail Specialist Detection Dogs in Mostyn, and Greenacres Farm Park on Deeside. The programme team communicate with professionals in the animal care industry, and have industry experience themselves; and this has influenced the programme specification and objectives.

The programme team demonstrate a diversity of relevant expertise appropriate for the proposed programme. Staff keep abreast of research relevant to the subject area, and

engage with CPD where-ever possible. The programme leader runs an ecological consultancy and carries out protected species surveys in North Wales. She is currently involved in research regarding bat roost mitigation following planning development. Angela Winstanley completed her MSc in 2011 and is currently engaged with a Strategic Insight Programme which aims to improve animal welfare. She is also a qualified animal behavioural counsellor and has experience of training a wide range of animal species including dogs, cats and horses. Richard Lewis is currently managing a number of industry projects including work in Africa to enable local communities to grow crops and access fresh water. Fernando da Mata is research active with interests in animal welfare, animal health epidemiology, animal performance and animal production systems. Currently Fernando is developing a new research project in the evaluation of horse fitness for exercise. Tamsin Young is involved in a multi-disciplinary research project investigating the human-horse relationship with Professor Lynda Birke at the University of Chester. She also holds the British Horse Society Assistant Instructors qualification and is a British Horse Society Intermediate Stable Manager. Professor David Skydmore has nearly 30 years of academic experience in horticulture, wildlife and plant biology and holds the Chair of Rural Policy at Wrexham Glyndŵr University in the School of Social and Life Sciences. Most staff are Fellows or Senior Fellows of the Higher Education Academy.

Industry feedback from employers involved with the previous FdSc Animal Studies has been positive and many students have been given employment opportunities following work experience placements in the Professional Practice module. This indicates that the skills gained by students are akin to those demanded by the industry.

These close links with industry and local organisations have been further developed through student participation in voluntary work, for example by undertaking nationwide and local wildlife surveys and providing students with practical experience, and access to current case work they have undertaken. These links have shown to enhance student learning particularly in relation to the survey techniques for the Survey Skills for Conservation module, and have provided placements for the Professional Practice and Applied Project modules.

BSc (Hons) Animal Science

The newly proposed BSc (Hons) Animal Science has been developed in line with feedback from other universities that the Animal Studies course did not provide sufficient science background for students wanting to progress to study further in Veterinary Science and Conservation Biology. In addition, the Student Voice Forum has shown that students on the FdSc Animal Studies favour a name change to Animal Science. Running both the Animal Studies and Animal Science programmes will not involve additional financial costing for the school as all modules are shared with other programmes at Northop (see module matrix in Appendix 1).

Students on this programme will develop a clear understanding of a broad range of scientific principles whilst also gaining practical competence with a wide range of species. Links with local organisations and industry will enhance their learning and give these graduates an understanding of the animal sector. A greater emphasis will be placed on developing scientific skills and biological understanding, preparing graduates for further study and research.

The BSc (Hons) Animal Science programme has been written in accordance with Royal Society of Biology degree accreditation guidelines (see Appendix 2) and it is hoped that accreditation will be gained after one full academic year of running. Accreditation by the

RSB is a clear indicator that the graduate has the correct skills and knowledge required by the Bioscience Industry to work effectively.

16 Programme structure narrative

FdSc Animal Studies and BSc Animal Studies (Hons) top-up

The proposed programme (Figure 1) will be delivered over two years, approximately three days a week if studied on a full-time basis, and over three years, two days a week if studied part time. Part time students will follow a specific route through the modules (Figure 2) that ensures that they will study them in a sequence that will provide them with the necessary skills, competencies and knowledge to take other modules within that level.

Employability

Throughout the degree and particularly at levels four and five there is a focus on skills for 'employability'. This is especially important in the animal sector as the perception of university or college students is that they still possess less practical experience than those trained for the industry by means such as work based apprenticeships (Lantra, 2011). At level four students undertake work experience in the Professional Practice module, and at levels four and five they complete practical skill modules. At level 5 the students enter the workplace again and take on the role of a consultant to investigate current issues within an organisation. The team has adopted the approach that learning in the workplace takes many forms e.g. work experience, educational visits, practical work, and use of the Animal Unit. The approach seeks to ensure that students are able to apply the knowledge, skills, attitudes and values expected by employers, customers, and external bodies. It also allows students to engage in continuing professional development.

During the Professional Practice module delivered at level four, students are expected to undertake 150 hours of work experience. There has previously been little difficulty in securing work experience placements for students, and typical placements have included time spent with local conservation organisations, veterinary surgeons, at pet shops and groomers and shadowing behaviourists.

Tutorial Support

In addition to formal module delivery all students on the programme will be supported by a personal tutor. One academic member of staff will be allocated to each year group, and will be responsible for conducting a weekly group tutorial, or will provide opportunity for individual tutorials. While tutorials have an appropriate pastoral function as part of the teaching/learning, they will be used for a number of purposes including: assessment of students' personal development and progress; helping students to develop learning skills; assisting students to make informed and realistic choices within their degree course; and providing support for individual or group project work.

BSc (Hons) Animal Science

The newly proposed BSc (Hons) Animal Science will be delivered over three years approximately three days a week if studied on a full-time basis (Figure 3), and over five years, two days a week if studied part time. Part time students will follow a specific route through the modules (Figure 4) that ensures that they will study them in a sequence that will provide them with the necessary skills, competencies and knowledge to take other modules within that level.

Employability, skill recognition and skill development is central to study at level 4 but differentiation to the Animal Studies course occurs at level 5. Nutrition & Feeding Practice and Population Biology & Genetics modules develop a further and broader understanding of scientific principles at level 5. It is expected that this will provide those students wanting to continue to further study with a sound basis in animal science comparable to other universities offering a degree in Animal Science. Differentiation will also occur at level 6 with the focus of the research project.

17 Programme structure diagram

FdSc Animal Studies and BSc (Hons) Animal Studies top-up

Figure 1. Structure of the full-time FdSc Animal Studies and BSc (Hons) Animal Studies top-up

Level 4					
Mod title	Biological Concepts	Mod title	Husbandry	Mod title	Professional Practice
Semester	1 & 2		1 & 2		1 & 2
Mod code	ANM412	Mod code	ANM414	Mod code	ANM413
New/Existing	New	New/Existing	New	New/Existing	New
Credit value	20	Credit value	20	Credit value	20
Core/Option	Core	Core/Option	Core	Core/Option	Core
Mod leader	Fernando da Mata	Mod leader	Fernando da Mata	Mod leader	Denise Yorke
Mod title	Academic & Personal Development	Mod title	Ethology and Anthrozoology	Mod title	Ethics & Welfare
Semester	1 & 2		1		2
Mod code	SCI411	Mod code	ANM402	Mod code	ANM406
New/Existing	Existing	New/Existing	Existing	New/Existing	Existing
Credit value	20	Credit value	20	Credit value	20
Core/Option	Core	Core/Option	Core	Core/Option	Core
Mod leader	Denise Yorke	Mod leader	Angela Winstanley	Mod leader	Angela Winstanley

Level 5					
Mod title	Anatomy & Physiology	Mod title	Applied Practice	Mod title	Learning & Training
Semester	1 & 2		1 & 2		2
Mod code	ANM513	Mod code	ANM514	Mod code	ANM515
New/Existing	New	New/Existing	New	New/Existing	New
Credit value	20	Credit value	40	Credit value	20
Core/Option	Core	Core/Option	Core	Core/Option	Core
Mod leader	Fernando da Mata	Mod leader	Richard Lewis	Mod leader	Angela Winstanley
Mod title	Survey Skills for Conservation	Mod title	Research Methodologies	Mod title	
Semester	1		2		
Mod code	ANM506	Mod code	AUR567	Mod code	
New/Existing	Existing	New/Existing	Existing	New/Existing	
Credit value	20	Credit value	20	Credit value	
Core/Option	Core	Core/Option	Core	Core/Option	
Mod leader	Denise Yorke	Mod leader	David Skydmore	Mod leader	

Level 6					
Mod title	Research Project	Mod title	Research Skills & Professional Development	Mod title	Animal Behaviour Modification
Semester	1 & 2		1 & 2		1 & 2
Mod code	SPT603	Mod code	ANM608	Mod code	ANM601
New/Existing	Existing	New/Existing	New	New/Existing	Existing
Credit value	40	Credit value	20	Credit value	20
Core/Option	Core	Core/Option	Core	Core/Option	Core
Mod leader	Tamsin Young	Mod leader	Tamsin Young	Mod leader	Angela Winstanley
Mod title	Stress & Animal Welfare	Mod title	Conservation Policy		
Semester	1		1		
Mod code	ANM609	Mod code	ANM607		
New/Existing	New	New/Existing	Existing		
Credit value	20	Credit value	20		
Core/Option	Core	Core/Option	Core		
Mod leader	Tamsin Young	Mod leader	Denise Yorke		

Figure 2. Structure of the part-time FdSc Animal Studies and BSc (Hons) Animal Studies top-up

Year 1 (Level 4)

Semester one	Semester two
ANM412 Biological Concepts (20 credits)	
SCI411 Academic & Personal Development (20 credits)	
ANM413 Professional Practice (20 credits)	
ANM406 Ethics and Welfare (20 credits)	

Year 2 (Levels 4 & 5)

Semester one	Semester two
ANM414 Husbandry (20 credits)	
	ANM402 Ethology and Anthrozoology (20 credits)
Level 5. ANM514 Applied Practice (40 credits)	

Year 3 (Level 5)

Semester one	Semester two
AUR567 Research Methodologies (20 credits)	
ANM506 Survey Skills For Conservation (20 credits)	ANM515 Learning & Training (20 credits)
ANM513 Anatomy and Physiology (20 credits)	

Year 4 (Level 6)

Semester one	Semester two
	ANM607 Conservation Policy (20 credits)
ANM601 Animal Behaviour Modification (20 credits)	
ANM609 Stress & Animal Welfare (20 credits)	

Year 5 (Level 6)

Semester one	Semester two
ANM608 Research Skills & Professional Development (20 credits)	
SPT603 Research Project (40 credits)	

BSc (Hons) Animal Science

Figure 3. Structure of the full-time BSc (Hons) Animal Science

Level 4					
Mod title	Biological Concepts	Mod title	Husbandry	Mod title	Professional Practice
Semester	1 & 2		1 & 2		1 & 2
Mod code	ANM412	Mod code	ANM414	Mod code	ANM413
New/Existing	New	New/Existing	New	New/Existing	New
Credit value	20	Credit value	20	Credit value	20
Core/Option	Core	Core/Option	Core	Core/Option	Core
Mod leader	Fernando da Mata	Mod leader	Fernando da Mata	Mod leader	Denise Yorke
Mod title	Academic & Personal Development	Mod title	Ethology and Anthrozoology	Mod title	Ethics & Welfare
Semester	1 & 2		1		2
Mod code	SCI411	Mod code	ANM402	Mod code	ANM406
New/Existing	Existing	New/Existing	Existing	New/Existing	Existing
Credit value	20	Credit value	20	Credit value	20
Core/Option	Core	Core/Option	Core	Core/Option	Core
Mod leader	Denise Yorke	Mod leader	Angela Winstanley	Mod leader	Angela Winstanley

Level 5					
Mod title	Anatomy & Physiology	Mod title	Nutrition & Feeding Practice	Mod title	Learning & Training
Semester	1 & 2		1		2
Mod code	ANM513	Mod code	ANM516	Mod code	ANM515
New/Existing	New	New/Existing	New	New/Existing	New
Credit value	20	Credit value	20	Credit value	20
Core/Option	Core	Core/Option	Core	Core/Option	Core
Mod leader	Fernando da Mata	Mod leader	Tamsin Young	Mod leader	Angela Winstanley
Mod title	Survey Skills for Conservation	Mod title	Research Methodologies	Mod title	Population Biology & Genetics
Semester	1		2		2
Mod code	ANM506	Mod code	AUR567	Mod code	LND511
New/Existing	Existing	New/Existing	Existing	New/Existing	Existing
Credit value	20	Credit value	20	Credit value	20
Core/Option	Core	Core/Option	Core	Core/Option	Core
Mod leader	Denise Yorke	Mod leader	David Skydmore	Mod leader	David Skydmore

Level 6					
Mod title	Research Project	Mod title	Research Skills & Professional Development	Mod title	Animal Behaviour Modification
Semester	1 & 2		1 & 2		1 & 2
Mod code	SPT603	Mod code	ANM608	Mod code	ANM601
New/Existing	Existing	New/Existing	New	New/Existing	Existing
Credit value	40	Credit value	20	Credit value	20
Core/Option	Core	Core/Option	Core	Core/Option	Core
Mod leader	Tamsin Young	Mod leader	Tamsin Young	Mod leader	Angela Winstanley
Mod title	Stress & Animal Welfare	Mod title	Conservation Policy		
Semester	1		1		
Mod code	ANM609	Mod code	ANM607		
New/Existing	New	New/Existing	Existing		
Credit value	20	Credit value	20		
Core/Option	Core	Core/Option	Core		
Mod leader	Tamsin Young	Mod leader	Denise Yorke		

Figure 4. Structure of the part-time BSc (Hons) Animal Science

Year 1 (Level 4)

Semester one	Semester two
ANM412 Biological Concepts (20 credits)	
SCI411 Academic & Personal Development (20 credits)	
ANM413 Professional Practice (20 credits)	
ANM406 Ethics and Welfare (20 credits)	

Year 2 (Levels 4 & 5)

Semester one	Semester two
ANM414 Husbandry (20 credits)	
	ANM402 Ethology and Anthrozoology (20 credits)
ANM516 Nutrition & Feeding Practice (20 credits)	LND511 Population Biology & Genetics (20 credits)

Year 3 (Level 5)

Semester one	Semester two
AUR567 Research Methodologies (20 credits)	
ANM506 Survey Skills For Conservation (20 credits)	ANM515 Learning & Training (20 credits)
ANM513 Anatomy and Physiology (20 credits)	

Year 4 (Level 6)

Semester one	Semester two
	ANM607 Conservation Policy (20 credits)
ANM601 Animal Behaviour Modification (20 credits)	
ANM609 Stress & Animal Welfare (20 credits)	

Year 5 (Level 6)

Semester one	Semester two
ANM608 Research Skills & Professional Development (20 credits)	
SPT603 Research Project (40 credits)	

18 Intended learning outcomes of the programme

Undergraduate					
Knowledge and understanding					
		Level 4	Level 5	Level 6	Level 6 Honours Degree
A1	Concepts, principles and theories in Animal Studies	Demonstrate knowledge of the fundamental concepts, principles and theories in Animal Studies	Appraise the concepts, principles and theories in Animal Studies and the way in which those principles have developed.	Demonstrate a critical understanding and explanation of the concepts, principles and theories in Animal Studies	Demonstrate a critical understanding and application of the concepts, principles and theories in Animal Studies
A2	Continuing change within Animal Studies	Identify areas of continuing change and development of the subject.	Evaluate continuing change and development of the subject.	Identify and critique current gaps in knowledge and or understanding and current issues in relation to animal behaviour, welfare and legislation	Demonstrate a critical understanding and knowledge of current issues of wider concern in relation to animal behaviour, welfare and legislation
A3	Mathematics and statistics skills	Demonstrates basic numeracy and understanding of statistical manipulation of data related to scientific problems.	Undertake more advanced numerical, mathematical and statistical skills and their applications in scientific investigation.	A critical understanding of essential knowledge of mathematics and statistics and its applications in scientific investigation.	A critical understanding of essential knowledge of mathematics and statistics and its applications in scientific investigation. Applies a range of specialist mathematical and statistical skills as appropriate to the specialist subject area

Intellectual skills					
		Level 4	Level 5	Level 6	Level 6 Honours Degree
B1	Academic communication and presentation	Demonstrate basic academic communication and presentation skills	Evaluate academic communication and presentation skills	Demonstrate extensive academic communication and presentation skills	Demonstrate professional academic communication and presentation skills

Intellectual skills					
		Level 4	Level 5	Level 6	Level 6 Honours Degree
B2	Research and literature	Demonstrate an awareness of academic literature and citation/referencing, perform searches for relevant information	Evaluate academic literature and correctly cite/reference using the relevant style, perform searches for relevant information	Demonstrate a full understanding of academic literature and correctly cite/reference using the relevant style. Critically evaluate the usefulness of Scientific literature	Demonstrate a full understanding of academic literature and correctly cite/reference using the relevant style. Critically evaluate the usefulness of scientific literature and show a strong ability to locate key information.
B3	Knowledge application	Demonstrate ability to organise and appraise the knowledge and understanding of the essential scientific facts, concepts and theories relating to the subject	Appraise and organise and appraise the knowledge and understanding of the essential scientific facts, concepts and theories relating to the subject	Organise efficiently and appraise the knowledge and understanding of the essential scientific facts, concepts and theories relating to the subject	Organise efficiently and critically appraise the knowledge and understanding of the essential scientific facts, concepts and theories relating to the subject
B4	Information assembly and evaluation	Demonstrate the ability to assemble information from a variety of sources and discuss and evaluate different viewpoints.	Appraise and evaluate information from a variety of sources and discuss and evaluate different viewpoints.	Assemble efficiently, evaluate and critically assess information from a variety of sources and discuss and evaluate different viewpoints.	Assemble efficiently, evaluate and critically assess scientific and educational data/information from a variety of sources and discuss and evaluate different viewpoints.

Subject skills					
		Level 4	Level 5	Level 6	Level 6 Honours Degree
C1	Animal management skills	Demonstrate a range of animal management skills	Critically evaluate and demonstrate and reflect on	Demonstrate and critically interpret a range of animal management skills	Demonstrate and critically analyse a range of animal management skills

Subject skills					
		Level 4	Level 5	Level 6	Level 6 Honours Degree
			a range of animal management skills		
C2	Practical skills	Undertake practical work in a responsible and safe manner, paying due attention to human and animal welfare, risk assessment, ethics, relevant health and safety regulations, legal requirements, and sensitivity of the impact of investigations on the environment and stakeholders.	Demonstrate a comprehensive understanding of human and animal welfare, risk assessment, ethics, relevant health and safety regulations, legal requirements, and sensitivity of the impact of investigations on the environment and stakeholders.	Demonstrate a critical interpretation of human and animal welfare, risk assessment, ethics, relevant health and safety regulations, legal requirements, and sensitivity of the impact of investigations on the environment and stakeholders.	Critically analyse human and animal welfare, risk assessment, ethics, relevant health and safety regulations, legal requirements, and sensitivity of the impact of investigations on the environment and stakeholders.
C3	Experimental Procedure	A basic understanding of the use of possible techniques, equipment and recording of field/laboratory data	Record and appraise experimental observations in a logical, comprehensive and contemporaneous manner. Interpret data/scientific information in a meaningful, structured manner.	Record and appraise Experimental observations in a logical, comprehensive and contemporaneous manner. Critically interpret data/scientific information in a meaningful, structured manner.	Record and appraise Experimental observations in a logical, comprehensive and contemporaneous manner. Critically analyse and interpret data/scientific information in a meaningful, structured manner.

Professional and employability skills					
		Level 4	Level 5	Level 6	Level 6 Honours Degree
D1	Problem solving	Apply theoretical concepts and principles of Animal Studies to a problem and appreciate the complexity of the issue	Appraise problems and choose appropriate tools/methods for their solution in a considered manner	Be confident and flexible in identifying and defining complex problems and can	Be increasingly independent, confident and flexible in identifying and defining complex

				apply appropriate knowledge and skills to their solution.	scientific problems, and in the application of knowledge and skills appropriate to their solution.
D2	Learning skills and time management	Understand and begin to develop the skills needed to learn and study independently and take responsibility for management of independent investigation, learning and time management.	Demonstrate independent learning and study and take responsibility for management of independent investigation, learning and time management.	Adopt a flexible approach to study designed to meet the needs of your goals. Work independently, setting and achieving appropriate goals.	With minimal guidance, manage own learning using a wide range of resources appropriate to the animal sector profession; seek and make effective use of feedback. Manage time and work effectively
D3	Team work and group skills	Interact with tutors and fellow students; participate in clearly defined group situations.	Demonstrate and evaluate more advanced interactive and group skills including effective participation in more demanding group tasks.	Debate, practise, reflect upon and apply professional skills such as communication, ICT, problem-solving, decision making and teamwork.	Interact effectively within learning or professional groups; recognise, support or be proactive in leadership, negotiating in a professional context and manage conflict.
D4	IT skills	Demonstrate basic use of the elements of Microsoft office; Word, Excel and PowerPoint. Demonstrate good skills in using the Internet and particularly virtual learning environment.	Demonstrate more advanced IT skills; Use online databases effectively to gain information	Use and access a limited selection of more specialist IT skills related to subject specific software. Conduct effective searches for information using a range of online resources.	Use and access a limited selection of more specialist IT skills related to subject specific software for analysing experimental data. Conduct effective searches for information using a range of online resources.

		Access data and information from University and other resources			
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19 Curriculum matrix

To demonstrate how the overall programme outcomes are achieved and where skills are developed and assessed within individual modules in FdSc Animal Studies.

	<i>Module Title</i>	<i>Core or option?</i>	<i>A1</i>	<i>A2</i>	<i>A3</i>	<i>B1</i>	<i>B2</i>	<i>B3</i>	<i>B4</i>	<i>C1</i>	<i>C2</i>	<i>C3</i>	<i>D1</i>	<i>D2</i>	<i>D3</i>	<i>D4</i>
Level 4	Professional Practice	Core	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Ethics and Animal Welfare	Core	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Biological Concepts	Core	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Academic and Personal Development	Core	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Ethology and Anthrozoology	Core	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Husbandry	Core	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Level 5	Applied Practice	Core	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Anatomy and Physiology	Core	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Learning and Training	Core	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Survey Skills for Conservation	Core	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Research Methodologies	Core	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

To demonstrate how the overall programme outcomes are achieved and where skills are developed and assessed within individual modules in BSc (Hons) Animal Studies top up.

	<i>Module Title</i>	<i>Core or option?</i>	<i>A1</i>	<i>A2</i>	<i>A3</i>	<i>B1</i>	<i>B2</i>	<i>B3</i>	<i>B4</i>	<i>C1</i>	<i>C2</i>	<i>C3</i>	<i>D1</i>	<i>D2</i>	<i>D3</i>	<i>D4</i>	
Level 6	Conservation Policy	Core	■	■	■	■	■	■	■	□	□	□	■	■	■	■	
	Stress & Animal Welfare	Core	■	■	■	■	■	■	■	□	□	□	■	■	■	■	
	Animal Behaviour Modification	Core	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
	Research Project	Core	■	□	□	■	■	■	■	□	■	■	■	■	■	■	■
	Research Skills & Professional Development	Core	■	□	□	■	■	■	■	□	□	□	■	■	■	■	■

To demonstrate how the overall programme outcomes are achieved and where skills are developed and assessed within individual modules in BSc (Ord) Animal Studies.

	<i>Module Title</i>	<i>Core or option?</i>	<i>A1</i>	<i>A2</i>	<i>A3</i>	<i>B1</i>	<i>B2</i>	<i>B3</i>	<i>B4</i>	<i>C1</i>	<i>C2</i>	<i>C3</i>	<i>D1</i>	<i>D2</i>	<i>D3</i>	<i>D4</i>
Level 6	Conservation Policy	Core	■	■	■	■	■	■	■	□	□	□	■	■	■	■
	Stress & Animal Welfare	Core	■	■	■	■	■	■	■	□	□	□	■	■	■	■
	Animal Behaviour Modification	Core	■	■	■	■	■	■	■	■	■	■	■	■	■	■

To demonstrate how the overall programme outcomes are achieved and where skills are developed and assessed within individual modules in BSc (Hons) Animal Science.

	<i>Module Title</i>	<i>Core or option?</i>	<i>A1</i>	<i>A2</i>	<i>A3</i>	<i>B1</i>	<i>B2</i>	<i>B3</i>	<i>B4</i>	<i>C1</i>	<i>C2</i>	<i>C3</i>	<i>D1</i>	<i>D2</i>	<i>D3</i>	<i>D4</i>
Level 4	Professional Practice	Core	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Ethics and Animal Welfare	Core	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Biological Concepts	Core	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Academic and Personal Development	Core	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Ethology and Anthrozoology	Core	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Husbandry	Core	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Level 5	Nutrition & Feeding Practice	Core	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Population Biology and Genetics	Core	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Anatomy and Physiology	Core	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Learning and Training	Core	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Survey Skills for Conservation	Core	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Research Methodologies	Core	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Level 6	Conservation Policy	Core	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Stress & Animal Welfare	Core	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Animal Behaviour Modification	Core	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Research Skills & Professional Development	Core	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Research Project	Core	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

20 Learning and teaching strategy

The learning and teaching strategy in place is suitable to maximise opportunities for attainment of all the programme aims. This aims to:

- 1) Have a continued emphasis on student-centred learning
- 2) Employ teaching methods that promote effective student learning, self-development and reflection
- 3) Deploy a variety of learning and teaching methods in the class, practical settings and the workplace, including:
 - Lectures and demonstrations
 - Seminars and workshops
 - Tutorials
 - Group and project work
 - Reflective reports
 - External speakers
 - Educational visits and study days
 - Tutor and student led sessions
 - Critical appraisal
 - Portfolio development

Examples of study visits, guest speakers, workshop sessions and demonstrations that may be offered during the programmes include:

Study visits – Animal welfare centres e.g. North Clwyd Animal Rescue; Conservation areas e.g. Otter survey on the River Alyn and Gigrin Red Kite Rehabilitation Centre, Rhayader; Captive animal collections e.g. Chester Zoo and Welsh Mountain Zoo; Working farms e.g. Leahurst Dairy Farm on the Wirral

Guest speakers – Adrian Lloyd Jones (Welsh Beaver Project), Emma Goodwin (Cheshire Training Dogs), Jonny Hulson (North Wales Wildlife Trust), Jenny Morgan (North Wales Owl Trust)

Demonstrations – Emma Goodwin lecture demonstration on application of canine learning theory.

This approach is intended to:

- a) strike a balance between 'class' activity and directed study 'out of class'
- b) provide sound feedback to students and attempt to involve them in identifying their own learning needs
- c) use directed and supported group work for sharing experience and knowledge and developing interpersonal skills
- d) provide realistic and relevant learning activities
- e) make use of a variety of assessment methods to allow students the opportunity to demonstrate their own particular capabilities.

All students will have a user account on Moodle which will give them access to a wide variety of information. This will be used for:

- Announcements: Lecturers will use the VLE to post important information, such as changes to teaching rooms, re-sit information, guest lecturer updates, or news about seminars and other events.
- Course information: The VLE will host the online version of their module handbook.
- Module information: Each module will have its own space. There will be a wide range of information, including the module handbook, worked seminar solutions

and other relevant information. Students will also receive a work placement specific handbook.

- Lecture notes will be made available to students. The VLE will also be used to allow student access to multimedia displays and documents such as diagrams and handouts. The VLE module area will include links to online resources, such as library information systems and useful websites.
- The VLE will be used to allow students to provide anonymous feedback to module organisers.

The team will continue to work with the University's Library to provide the best possible on-line information services to students. A full list of useful sources of information, including electronic journals, will be detailed in the Student Handbook. Library and Support Service staff regularly updates such information on the Intranet.

Students are expected to attend all timetabled sessions and, in those instances where they are unable to do so, they are expected to inform staff with responsibility for registers and retention.

Timetabled sessions may occur at both Wrexham and Northop, in addition to off-site visits. Students also spend time working independently on both campuses and are encouraged to utilise resources at both sites. Electronic journals and use of the VLE will also ensure students can adopt flexible working arrangements.

Ethics and animal welfare will be embedded as a key theme throughout the programmes. Teaching and learning on the majority of modules within the programmes will incorporate ethical and welfare themes. Students are introduced to a range of moral philosophies and encouraged to develop a cohesive understanding of animal welfare throughout the modules and topics of study. These themes will also be visited on a weekly basis in group tutorial sessions.

21 Work based/placement learning statement

Students enrolled on both Animal programmes will be required to complete 150 hours of workplace learning during level four. The placement will be approved by the module leader and may be completed at one location or divided between suitable numbers of placement providers. To enable flexibility there will be opportunity for the student to complete their work placement around other commitments. It is expected that students will carry out their placement over the Summer Term (with grades going to the September Board) however, work experience may be undertaken during the evening, days off, weekends or University holidays. Any student who fails or defers this module may trail it into the second year (assuming they have passed 80 credits). Students on the FdSc Animal Studies complete a further 150 hours of work-based enquiry during the second year as part of the Applied Project module. A wide range of organisations have been involved with the University as work placement partners. These include:

- Welsh Mountain Zoo, Colwyn Bay
- Leahurst Veterinary Hospital, Wirral
- North Clwyd Animal Rescue, Trelogan
- Chester Zoo, Cheshire
- Knowsley Safari Park, Sefton

- Vets 4 Pets, Wrexham
- Cats Protection, Wrexham
- Wagtail UK Ltd, Mostyn
- Dogs Trust, Heighton
- RSPCA Colwyn Bay
- Loggerheads Country Park, Mold
- Blue Planet Aquarium, Ellesmere Port
- Seaquarium, Rhyl
- North Wales Wildlife Trust
- NEWWildlife
- Cotswold Wildlife Park, Oxfordshire
- North Clwyd Special Riding Centre
- VulPro Vulture Rescue, South Africa
- Hartebeespoort animal sanctuary, South Africa
- Horse Ranch, Melbourne
- Critter Care animal rehabilitation, Canada
- Dolphin & Whale survey (Frontier), Tenerife
- Uniao Zoofila (animal rescue), Lisbon
- Koirakuntosali Canine Physiotherapy Clinic, Finland

It is the responsibility of the module leader to ensure that the student and their workplace mentor are fully aware of their responsibilities (below) in meeting the requirements of the placement. A Placement Providers Handbook provides the legal and academic information for the workplace organisation. The Negotiated Learning Contract between student, placement provider and tutor forms part of the coursework and clearly sets out the responsibilities of each party:

Student responsibilities:

- Agree with the Module Leader the suitability of the proposed workplace provider and nature of the activities to be undertaken.
- Negotiate the learning contract for the placement with the workplace employer.
- Engage and manage learning opportunities within the placement with support from the module leader.
- Ensure workplace policies and procedures are adhered to always and ensure familiarity with relevant policies and procedures, e.g. lone working, handling of specialist equipment and working with specific populations.
- Act responsibly and professionally within the workplace.
- Maintain a safe environment and ensure health and safety measures.
- Maintain appropriate relationships with other organisational staff, participants and volunteers.
- Maintain confidentiality always.
- Identify and manage learning opportunities with support from the module leader.
- Alert the workplace manager/mentor and/or the module leader to problems that may interfere with attainment of aims specified in the learning contract and/ or safety.

Employer manager / mentor responsibilities:

- Ensure completion of relevant health and safety documentation prior to commencement of the student placement.
- Agreement of the learning opportunities to be made available to the student prior to the commencement of the placement.

- Maintain regular contact with the module leader, attending mentor support study days as required.
- Enable the student to have every opportunity to meet the agreed learning contract.
- Ensure student is fully inducted in all relevant policies and procedures to maintain a safe environment including; lone working, handling of specialist equipment and working with specific populations.
- Maintenance of a safe environment throughout the duration of the placement.
- Liaise with the module leader to discuss the student's performance at designated reference points throughout the placement.
- Completion of a witness statement / feedback sheet on completion of the placement.

Module leader responsibilities:

- Ensure that health and safety checklists and workplace profiles have taken place prior to commencement of the work placement.
- Maintain regular contact with the student and the workplace mentor/manager to discuss issues as they arise.
- If any questions are raised regarding the work experience location for Professional Practice, a site visit will be undertaken by the module leader.
- Ensure that student has adequate access to learning tools and opportunities.
- Negotiate and identify learning opportunities with the student and their mentor.
- Provide modular support sessions to individual or groups of students on location.
- Maintain own development in monitoring of health and safety of placements and developing the role of the link tutor.
- Establish and encourage placement feedback from students and mentors and contribute to the development of quality assurance of placements.

The module leader will contact the placement provider initially to confirm the nature of the activities to be undertaken during the proposed placement, and then to monitor progress. In the event of any concern expressed by either the student or their workplace mentor, the module leader will report this immediately to the programme leader who will advise on the various courses of actions open to resolve any issues. The mentor will be required to complete a witness statement / feedback sheet at the end of the placement to aid the student in the completion of their learner journal.

These responsibilities form the basis of an individually agreed student placement handbook (Negotiated Learning Contract). Once an appropriate placement has been confirmed the module leader will contact the placement provider initially to confirm the nature of the activities to be undertaken during the proposed placement. Thereafter communication arrangements will be agreed as part of the learning agreement and as a minimum contact will be made monthly by the module leader to monitor progress. In the event of any concern expressed by either the student or their workplace mentor, the module leader will report immediately to the programme leader who will advise on the various courses of actions open to resolve any issues. The mentor will be required to complete a witness statement at the end of the placement to aid the student in the completion of their learner journal.

The management of workplace learning is undertaken in accordance with the QAA Code of Practice for the assurance of academic quality and standards in higher education Section 9: Work-based and placement learning (QAA, 2007).

22 Welsh medium provision

In line with University's Welsh Language Policy, students are entitled to submit assessment in Welsh. The programme however will be delivered through the medium of English.

23 Assessment strategy

Module code & title	Assessment type and weighting	Assessment loading	Indicative submission date
SCI411 Academic and Personal Development	100% Portfolio	4000 words	Coursework completed throughout year
ANM413 Professional Practice	30% Presentation 20% Negotiated Learning Contract 50% Reflective Practice Assignment	15 mins/ 1200 words 800 words 2000 words	November August October
ANM406 Ethics and Welfare	60 % Presentation 40 % Learning log	20 mins 2400 word equivalent 1600 words	March May
ANM412 Biological Concepts	50% In-class test 50% Essay	2000 words 2000 words	May January
ANM402 Ethology and Anthrozoology	60% Poster Presentation 40% Group Project	2400 words 1600 words	November January
ANM414 Husbandry	40% Practical 60% Report	1600 word equivalent 2400 words	April February
ANM506 Survey Skills for Conservation	100% Coursework	4000 words	Coursework completed throughout year
ANM513 Anatomy & Physiology	40% Exam 60% Portfolio	1600 2400 words	May March
ANM515 Learning and training	40% In class test 60% Case study	1600 words 2400 words	April March
ANM514 Applied Practice	50 %Report 30%Reflective practice 20% Presentation	2000 words 1200 words 20 minutes/ 800 word equivalent	May April March
AUR567 Research Methodologies	75%Research proposal 25%Presentation	3000 words 15 min/ 1000 word equivalent	May April

ANM516 Nutrition & Feeding Practice	50% In-class test 50% Case Study	2000 words 2000 words	January November
LND511 Population Biology and Genetics	50% Essay 50% Time constrained assessment	1500 words 1.5 hours	March May
SPT603 Research Project	25% Literature Review 75% Dissertation	2000 words 4500 words	December May
ANM608 Research Skills & Professional Development	50% Oral assessment 50% Portfolio	2000 words 2000 words	December May
ANM601 Animal Behaviour Modification	20% Case Study 30% Case Study 50% Case Study	800 words 1200 words 2000 words	February March April
ANM609 Stress & Animal Welfare	60% Report 40% In-class test	2400 words 1600 words, 60 mins	March May
ANM607 Conservation Policy	30% Presentation 70% Essay	15 min/1200 word equivalent 2800 words	November January

24 Assessment regulations

Bachelor Degrees, Diplomas, Certificates and Foundation Degrees.

Derogations

N/A

Non-credit bearing assessment

N/A

Borderline classifications (for undergraduate programmes only)

For borderline classifications, at least 50% of the credits at level six will fall within the higher classification, and the grade for the Research Project will be considered.

Restrictions for trailing modules (for taught masters programmes only)

N/A

25 Programme Management

Programme leader

Denise Yorke

Programme team

Professor David Skydmore

Dr Tamsin Young
Fernando da Mata
Denise Yorke
Angela Winstanley
Professor Lynda Birke (visiting Professor)

Quality management

The Programme Leader will have overall responsibility for the operation and development of the degree, but will work closely with Module Leaders, Module Tutors, Personal Tutors and Administrative Support personnel. The Programme Leader will also meet regularly with the Head or Associate Head of School.

Control of quality on the Animal Studies Foundation Degree will conform to the procedures set out by Glyndŵr University's requirements for academic quality assurance, monitoring and review.

The monitoring and evaluation of academic standards will be achieved through a range of methods that will ensure the appropriateness of the learning, teaching and assessment mechanisms. These will include the External Examiner system, moderation of assessed coursework, and peer observation of teaching.

The External Examiner will be a key mechanism for quality regulation. Their input is sought prior to each boards, and during a visit to the university (usually May). They provide a written report during the Summer on findings from the previous academic year. Feedback from the Programme Team will be sent to the External Examiner following receipt of the written report, and comments from the External Examiner's report will feed directly into the Annual Monitoring Report (AMR).

Feedback from students will also be an important mechanism for quality regulation, and is achieved through the National Student Survey, Student Voice Forums (SVF), module feedback forms, and through informal tutorial discussion. Feedback from students will be acted on by incorporating their comments into Module Reports and then into the AMR and following up requests or comments where possible.

At a modular level quality management of delivery and assessment will be guaranteed through the moderation system. Assessed coursework will be moderated prior to feedback to students, and at level six all research projects will also be moderated by the external examiner. The ethics process will also help guarantee quality, in that all level six project proposals will be considered by the ethics committee prior to any data collection. Any ethics proposals requiring corrections will be completed by the student and overseen by their supervisor. Corrected ethics proposals will be resubmitted to the board for approval before the student starts their research.

Where students interact with employers during any form of work experience, quality systems will be implemented. At level four where students undertake work experience, students will be issued with Glyndŵr paperwork to complete whilst arranging their placement. This will ensure health and safety, and will help inform the employer of the requirements of the placement and Glyndŵr's requirements in supporting the student. Feedback from the employer will be gathered during the placement through liaison with the workplace tutor, and following the placement via a simple form returned to the tutor.

The quality of teaching, learning and assessment will also be guaranteed through peer observation, and identification of staff development needs. All staff will be subject to

Glyndŵr University's Peer Observation scheme. Staff development needs will be identified during an annual review.

Research and scholarship activity

Ongoing research and staff development guarantees the curriculum and teaching remains current and underpinned by scholarly activity. The Programme Leader runs an Ecological Consultancy and carries out protected species surveys in North Wales. Staff also attend industry meetings and updates and are members of professional bodies including Society of Biology, British Horse Society and International Society of Equitation Science. Staff also have active links with the animal industry e.g. through work placement providers, guest speakers, educational visit providers. Most staff members also have their own animals and horses and thus attend regular competitions, training and events and keep up to date with recent developments in the industry.

26 Learning support

Institutional level support for students

The University has a range of departments that offer the support for students as:

- Library & IT Resources
- The Assessment Centre
- DisAbility Support Team
- Irlen Centre
- Careers Centre and Job Shop
- Zone Enterprise hub
- Chaplaincy
- Counselling & Wellbeing
- Student Funding and Welfare
- International Welfare
- Student Programmes Centre
- Glyndŵr Students' Union

The support for learning process would begin for a Glyndŵr University student from the moment that they join the university. The induction period is an important time enabling students to familiarise themselves with the support facilities offered by the university via small group taster sessions and talks provided by support staff. Students would also have opportunities during that period to have individual meeting with their personal tutors and support staff should they wish. Such provisions aim to determine additional support required by students, and highlight any potential issues to academic staff concerning individual needs.

Supportive formative and summative feedback to students is an important element of the learning process. All students will be allocated a personal tutor who is a member of staff teaching on the programme. While tutorials have an appropriate pastoral function as part of the teaching/learning, they will be used for a number of purposes including: assessment of students' personal development and progress; helping students to develop learning skills; assisting students to make informed and realistic choices within their course; and providing support for individual or group project work.

There are a variety of established procedures and policies with respect to the learning support mechanisms available to students, which are co-ordinated with strategies in place at the Institutional level. The team will be able to draw on their considerable experience of teaching students with differing needs, particularly dyslexia, and have a proven track record of working with students from varied educational backgrounds, including mature students. Tutors will direct students to the wide range of additional support services available within the University's Disability and Learning Support team. Services offered by this support team include educational support, welfare services, healthcare provision and disability services as well as practical services including photocopying and e-learning. The support team may choose to offer the students diagnostic testing to assess their learning needs before offering help.

The learning infrastructure and support extends beyond staffing and student support systems. There are excellent specialist facilities available to students studying on the programme. There are specialist Animal Care facilities at Glyndŵr University Northop available to students studying on the programme. A wide range of animal species and accommodation are available for study and practical experience, including a practical animal unit and rare breeds farm park, together with adjoining classrooms and laboratory facilities. Students will have timetabled access to the units and will be supervised by the module tutor and animal unit staff.

The equine unit at Glyndŵr University Northop is a BHS approved establishment that was purpose-built in 1997, and includes practical facilities that consist of an American style barn building incorporating stables, a tack room, feed room, locker room and office. Adjoining the stabling are both indoor and outdoor arenas. The indoor arena has a modern viewing containing seating and a classroom complete with interactive whiteboard. The equine unit also has the use of two large fields and a paddock for grazing and riding and there is a cross-country course nearby within the college campus.

Such facilities will be utilised to enable students to develop their practical skills, for example when learning about animal husbandry or training.

On the both the Northop and Wrexham campuses, students will be able to utilise IT and library facilities.

School support for students

The School has made provision for support services to be active on the Northop campus as well as at Wrexham. Students studying at Northop can access support services each week in the student support room, and can gain access to careers, chaplaincy, counselling and well-being in the student hub. Academic Skills Tutors and Library staff can also attend on request. The school also ensures the administrative team visit the Northop campus weekly to provide the staff and student team with support on issues such as recording registration of attendance, enrolment and recording module grades. Students may also request books via email from the library which can be placed on the shuttle bus and delivered to Northop.

Programme specific support for students

Embedded throughout all courses run at the Northop Campus is a culture of support and sustainability. Self-resilience amongst students and staff is promoted formal through support from the Counselling Team and the regular visits from the University Chaplain. Informal support is provided by the three social clubs based at Northop; The Zoological Society, Equine Society and the newly formed Botany Society. They offer trips, guest lectures and social gathering that help students to feel part of the University. The tutorial system also allows students to seek help and support when needed.

Students will be encouraged to disclose any special learning needs from the outset of the degree. This will be carried out on the UCAS or direct university application form or to a tutor once they have joined the programme. The induction week held at the start of the degree (level four) also provides an opportunity to 'get to know' new students and for them to reveal any learning needs they may have. The week is a mixture of imparting information and social events, such as the visit to Ty Mawr Country Park. Should a special learning need be disclosed students will be directed to the Disability Team. Students have previously received help in the form of note takers in lectures, one to one help to compile coursework, or help from the team with specific needs such as Irlen Syndrome or dyslexia.

All students have access to tutorial support throughout their degree. This takes the form of group and individual tutorials. The Personal Development Process (PDP) also formalises the tutorial system and ensures that specific checkpoints exist where students can obtain help should it be needed. The process also enables tutors to support students should they feel help is necessary.

Students on the courses will have use of both facilities at the Northop and Wrexham campuses. The Northop campus offers students IT facilities within a specially designed computer room and through open access in the resources and common room. There is a small library on site and a reference library provided by Coleg Cambria. Laboratory facilities are also offered at the Northop Campus. As this is only a small laboratory cohorts are divided and taught in smaller groups. Students using the laboratory facilities are taught by the module tutor, and those not engaged in laboratory work are set tasks related to the laboratory practical to complete in the allocated lecture room or in the resources room. This practice enables the underpinning theory to be revised and the practical tasks to be completed.

Students are provided with a free shuttle bus between the Northop and Wrexham campuses (travelling between sites twice daily) so the Wrexham library can be made full use of. Books can be returned on the shuttle bus without the student accompanying them. All Northop based students are also provided with access to electronic resources through the university library site.

27 Equality and Diversity

Glyndŵr University is committed to providing access to all students and promotes equal opportunities in compliance with the Equality Act 2010 legislation. This programme complies fully with the University's Equal Opportunities Policy (<http://www.glyndwr.ac.uk/en/AboutGlyndwrUniversity/Governance/TheFile.64499.en.pdf>), ensuring that everyone who has the potential to achieve in higher education is given the chance to do so.

The programmes have been designed to offer equality of access and takes account of all current regulations and legislation in relation to diversity and inclusion, including the

Equality Act 2010. Learning, teaching and assessments are structured so that they do not discriminate on the grounds of disability or previous ability. Where individuals may have difficulty in completing the more physical aspects of coursework, tasks will be modified to avoid discrimination but without jeopardising the equity and parity of the assessment process. Students with specialised individual learning needs are signposted to the student services department who are able to provide assessment and appropriate Additional support. This has previously included provision of note takers and audio equipment. Module tutors are made aware of students' individual needs and adapt their teaching and assessment methods accordingly. Any information provided for students will use plain language that is free from bias and there will be no covert or overt discrimination in wording or content. Likewise there will be no barriers to achievement in the assessment requirements in terms of gender, age, race, sexual orientation and religion / belief.