**UNIVERSITY OF NEWCASTLE UPON TYNE**

**FACULTY OF SCIENCE, AGRICULTURE & ENGINEERING**

**DEGREE PROGRAMME SPECIFICATION**

UNIVERSITY OF NEWCASTLE

| | | |
|---|---|---|
| **1.** | **Awarding Institution** | University of Newcastle upon Tyne |
| **2.** | **Teaching Institution** | University of Newcastle upon Tyne |
| **3.** | **Final Award** | BSc (Hons) |
| **4.** | **Programme Title** | Zoology |
| **5.** | **Programme Accredited by:** | not applicable |
| **6.** | **UCAS Code** | C300 |
| **7.** | **QAA Benchmarking Group(s)** | Biosciences |
| **8.** | **Date of production/revision** | 30th November 2004 |

## 9. Programme Aims

1. To produce graduates with:

a) a thorough knowledge and understanding of modern Biology at a general level, and at a more advanced level of areas of modern Zoology including animal behaviour and animal ecology.

b) a wide range of transferable skills, including skills in: laboratory techniques; field techniques; scientific communication; and analysis of data.

c) an experience of a curriculum enhanced by an active research environment, which inspires enthusiasm for Zoology and encourages critical, constructive thinking.

d) qualifications to exploit a wide range of employment opportunities, including in conservation organisations, in biomedical institutes, in industry and in commerce.

2. To recruit well qualified students from a variety of educational backgrounds who wish to undertake a wide ranging, coherent programme of study in Zoology.

3. To provide a programme which: meets the National Framework for Higher Education Qualifications at Honours level; and takes appropriate account of the subject benchmark statements in Biosciences.

## 10. Intended Learning Outcomes; Teaching and Learning Strategies and Methods; Assessment Strategies and Methods

### A Knowledge and understanding

A1 Knowledge of Zoology from the molecular to the community level.

A2 Knowledge of the diversity of animal and of the principles used to classify them. An understanding of phylogeny and evolution.

A3 An understanding of the ways that different types of animals function, including their physiology and behaviour. An understanding of how animals are adapted to survive and reproduce in different environments.

A4 An understanding of ecology, including of the relationships between different animals and between animals and plants.

A5 Knowledge of aspects of subjects related to Zoology, such as Marine Biology or Psychology.

A6 Experience and appreciation of the operation of the scientific method, including the importance of careful observation, the formulation and testing of hypotheses, and the integration of the results with wider knowledge.

A7 An informed awareness of the relevance of Zoological Knowledge to Society and to contemporary Human problems and needs. Knowledge of legal and ethical aspects of Animal Welfare. First-hand experience of the work performed by professional biologists.

*Teaching Strategy*

Knowledge and understanding are principally imparted through lectures, tutorials and independent reading associated with them. Almost all aspects of the course are relevant to *A1-A3*, and many are relevant to *A4. A5* is achieved through optional choices, particularly at Stage 1. The main function of Stage 1 is to establish a solid grounding in modern Biology whereas much of the teaching at Stages 2 and 3 is more focused on areas of Zoology. Besides imparting factual knowledge, the teaching at Stages 2 and 3 encourages students to think critically about the evidence for factual knowledge, and about the limits of knowledge. The subjects taught at Stage 3 reflect research specialities of staff and bring students towards the cutting edge of modern investigations. Students are introduced to primary research publications in scientific journals at stages 2, and develop skills at communicating about Science at Stages 2 and 3 by guided practise in tutorials, practical classes and individual projects. *A6* is also taught by practise in scientific investigations gained in practical classes, fieldwork and project work. A specialised lecture and seminar course imparts knowledge and gives opportunity for debate relevant to *A7*, as does an independent project that is conducted in a location of the student's own choosing.

*Learning Strategy*

Throughout the taught component of the course, students are encouraged and expected to engage in independent reading, and are supported in this by the provision of reading lists, handouts and access to library and web-based resources, particularly the University's Blackboard Teaching site. Formative feedback is provided during tutorials, seminars and for practical work. Initiative is needed, and confidence gained, by students conducting their own project in the 'Zoology Overseas' Module.

*Assessment strategy*

Assessment is partly by way of unseen written examinations (essay-type questions, short answer questions, problem-solving questions as appropriate) and partly by way of coursework. Most modules at stages 1 and 2 include coursework, thus ensuring that elements of formative, as well as summative, assessment are employed. In coursework, a variety of assessment methods are used. At stage 3 the distribution of exam-assessed and in-course assessed work is more polarised between modules, though as at stages 1 and 2 each form a major part of the whole stage 3 assessment.

**B Subject–specific/professional skills**

B1 Experience in accessing and assessing validity of sources of zoological information. These sources include books, research literature, pubic media, and the World-Wide Web.

B2 The abilities: to make observations; and to use appropriate instruments to collect data in scientific investigations. These abilities are important both for field and for laboratory work.

B3. The abilities: to design experiments and surveys; and to use the scientific method to undertake original investigations.

B4 The abilities: to select and use appropriate techniques for data analysis; and to present data using statistical, graphical and other techniques.

*Teaching Strategy*

*B1* is developed particularly by tutorial classes, library projects, project work and work in the Hancock Museum. B4 is introduced by a course in statistics at Stage 1. *B2-B4* are developed in taught laboratory and field classes and in project work. The Residential Field Course and the Research Project, both at Stage 3, are particularly significant by encouraging students to practise practical skills with the help of feedback from staff.

*Learning Strategy*

Independent and group project based exercises reinforce these lessons and allow self-evaluation and critique.

*Assessment strategy*

Subject-specific skills (*B1-B4*) are evaluated by assessed written reports. However, assessment of the laboratory work itself is a feature of some practical components and is often taken into account in the Research Project. *B2* and *B4* are particularly assessed by written report of the Research Project.

**C Cognitive skills**

A successful student will be able to:

C1 Handle data from a variety of Zoological disciplines.

C2 Interpret observations and data.

C3 Appraise observations and data and produce a reasoned argument.

C4 Communicate effectively about Science using both written and oral presentations.

C5 Solve problems.

*Teaching Strategy*

Cognitive skills are developed through: lectures and seminars (*C1, C2*); practical classes in laboratory and field, (*C2, C3)* and tutorials and seminars (*C4*). They are refined during Stage 3 in project work during the Residential Field Course and Zoology Overseas as well as during the Research Project.

*Learning Strategy*

Independent and group project based exercises reinforce these lessons and allow self-evaluation and critique. Some practical classes, as well as the project work, involve problem solving.

*Assessment strategy*

Cognitive skills are assessed by: unseen written examinations (*C1*), particularly that for Zoology Masterclass; practical work, project reports (*C2*); assigned work reports, student talks, seminars, poster presentations and particularly by the Research Project dissertation (*C3, C4*).

**D Key (transferable) skills**

A successful student will be able to:

D1 Use sources of information effectively.

D2 Summarise and communicate orally, graphically and in writing in a manner appropriate to the target audience.

D3 Work effectively both independently and as a member of a team.

D4 Plan a programme of work so that the at work is both competent and timely.

D5 Recognize and solve problems.

D6 Develop a sense of responsibility to society and the environment.

*Teaching Strategy*

Key skills (*D1-3* and *D5*) are taught through: Biology Research Communication lectures and tutorials at Stage 2, and by work for tutorials, library and other projects in Stage 3. *D6* is developed the Zoology Masteclass; and by lectures and seminars on Conservation.

*Learning Strategy*

Key skills are practised under guidance from teacher feedback in practical classes and in specialise tutorials at Stage 2, and developed further through project work at Stage 3. All work that is assessed in-course is subject to submission deadlines (*D4*). *D5* is developed by practical work, Zoology Overseas, the Research Project.

*Assessment strategy*

Key skills are assessed in student talks, seminars at Stage 2 in Biology Research Communication (*D1-D2)*, reports for Zoology Overseas, the Research Project and the Residential Fieldcourse (*D1*-D4).

## 11 Programme Features, Structure and Curriculum

### A Programme Features

1. Duration, three years; comprises three Stages; a total of 360 credits, 120 credits in each Stage; module credit values vary between 10 and 20 (10 credits represents 100 hours of student activity).
2. Progression: Pass in 120 credits is required in Stages 1 and 2. Modules that are failed with a mark of 35% or more can be compensated for by passes at 40% or more in other modules. The Board of Examiners may recommend a pass at a lower mark if circumstances warrant. Students who do not satisfy the requirements to progress within the Honours degree programme but who do satisfy the requirements for progression within the parallel Ordinary degree programme at the end of Stage 1 or Stage 2, or, on tutorial advice, during Stage 2.
3. Innovative features of the degree programme include the organisation of the programme with a highly coherent core (particularly at Stage 3, when core lecture courses are integrated with advanced tutorials, seminars and practical courses) combined with attractive options at each stage. An extensive programme of field and laboratory studies are integrated into the programme; there is a system of specialist tutorials and library projects at Stages 2 and 3. An introduction to original investigations is provided in the Residential Field course. The Zoology Overseas module provides opportunity to gain first-hand experience of professional biological work. A Research Project is carried out in collaboration with a member of academic staff. Animal Welfare and function of museums are taught by professional experts as part of the Zoology Masterclass.

### B Programme Structure

*Stage 1*

At Stage 1, students are given a thorough grounding in Zoology and Biology in general (*A1-4*). Introduction to associated subjects forms one sixth of the year's study (*A5*). All the subject-specific skills specified (*B1-4*) are developed by the practical components of these modules, as are some cognitive (*C1-3*) and key skills (*D1-3*).

*Stage 2*

At Stage 2, both the depth and breadth of zoological knowledge (*A1-5*) are increased to provide a wide-ranging introduction to the subject. Some courses are based on taxonomic groups (eg, insects, vertebrates, contributing particularly to *A2*), whilst others deal with topics (development, physiology) from a comparative perspective. Subject-specific skills are developed by modules on communication in Science (*B1*) and practical classes (*B2 - 5*). Skills in communication contributes to outcomes *B1, C1* and *C4*; and *D1, D2* and *D4*. Work in practical classes and promotes independent and collaborative endeavour (*D3, D4*) and problem solving (*D5*).

*Stage 3*

At Stage 3, knowledge and understanding (*A1, A3 and A4*) are developed by the four compulsory lecture modules, which are largely based on primary research literature. These exemplify the programme's approach to the subject which relates to different levels of organisation of animals (eg, from molecule to ecosystem; *A1*). Other modules (eg, on ornithology and reproductive biology) broaden the learning experience at this stage (*A2*). Zoology Masterclass (tutorials and seminars) further develop experience in accessing sources of zoological information (*B1*) and most cognitive (*C1, C3, C4)* and key skills (*D1-4, D6*). These Masterclass also provide a grounding in relevance of Zoological Knowledge to Society (*A7*). Zoology Overseas promotes an interest in the work of professional zoologists in a contemporary setting, encourages problem solving skills (*C4, D5*), develops the ability to communicate in a manner appropriate to the target audience (*D2*) and a sense of responsibility to society and the environment (*D6*). The Field Course and the Research Project develop an appreciation of the scientific method (*A6*), all subject-specific skills (*B1-5*) and many cognitive skills(*C2-4*) and key skills (*D1-5*).

## C Programme Curriculum

**Degree of Bachelor of Science with Honours in Zoology**

**UCAS Code: C300**

*Note: all modules are offered subject to the constraints of the timetable and to any restrictions on the number of students who may be taught on a particular module. Not all modules may be offered in all years and they are listed subject to availability.*

1. **Stage 1**

(a) All candidates shall take the following compulsory modules:

| *Code* | *Credits* | *Descriptive title* |
|---|---|---|
| BIO102 | (20) | Biology Skills and Numerical Methods |
| BIO103 | (20) | Form and Function - Cells and Animals |
| BIO104 | (10) | Evolution for Biologists |
| BIO105 | (20) | Behaviour and Ecology |
| AGR112 | (20) | Introductory Biochemistry for Biologists |
| AGR105 | (10) | Introduction to Genetics |

(b) All candidates shall select, subject to the approval of the Degree Programme Director, further modules with a total value of 20 credits, normally chosen from the following list:

| *Code* | *Credits* | *Descriptive title* |
|---|---|---|
| MST100 | (20) | Biodiversity of Marine Animals |
| PSY163 | (10) | Personality |
| PSY171 | (10) | Biological Psychology |

2. **Stage 2**

(a) All modules are Honours modules.

(b) All candidates shall take the following compulsory modules:

| *Code* | *Credits* | *Descriptive title* |
|---|---|---|
| BIO204 | (10) | Biology Research Communication |
| BNS232 | (10) | Introduction to Molecular Biology |
| BIO203 | (10) | Biodiversity and Conservation |
| MSM228 | (10) | Animal Development |
| AES264 | (10) | Ecology of Populations and Communities |
| AES217 | (10) | Entomology |
| AES256 | (10) | Vertebrate Evolution and Diversity |
| AES261 | (10) | Population Genetics and Natural Selection |
| NEU203 | (20) | Comparative Animal Physiology |

to a total value of 20 credits from the following:

| *Code* | *Credits* | *Descriptive title* |
|---|---|---|
| MST201 | (10) | Tropical Marine Environments and Ecology |
| PSY213 | (10) | Motivation |
| MSM222 | (10) | Fisheries Biology and Aquaculture |
| AES218 | (10) | Entomology Field Course* |
| AES224 | (10) | Methods in Animal Behaviour |
| AGR224 | (10) | Animal Parasitology |

Students may opt for Student Tutoring (CAD202), with the permission of the Degree Programme Director.

* *Note: AES218 Entomology Field Course will take place at the end of the second assessment period for Stage 2.*

3. **Stage 3**

(a) Candidates shall take the following compulsory modules:

| *Code* | *Credits* | *Descriptive title* |
|---|---|---|
| MSM306 | (10) | Biology of Secretion |
| MSM343 | (10) | Zoology Masterclass |
| MSM344 | (10) | Zoology Overseas§ |
| MSM347 | (10) | Behavioural Ecology |
| MSM396 | (10) | Residential Field Course (Zoology)* |
| MSM397 | (20) | Research Project (Zoology) |
| BIO301 | (10) | Conservation Biology Issues |
| NEU301 | (10) | Mechanisms of Behaviour |

* *Note: MSM396 Residential Field Course (Zoology) will take place at the end of the second assessment period for Stage 2.*

§ *Note: MSM344 will take place during the summer vacation preceding Stage 3.*

(b) All candidates shall select, with the approval of the Degree Programme Director, further modules with a total value of 30 credits from the following:

| *Code* | *Credits* | *Descriptive title* |
|---|---|---|
| MSM332 | (10) | Reproduction and Life History |
| MSM338 | (10) | Advances in Marine Ecology |
| AES303 | (10) | Animal Population Dynamics |
| AES317 | (10) | Plant-Animal Interactions |
| CMS301 | (10) | Ornithology |
| AES302 | (10) | Animal Ecophysiology |

4. **Assessment Methods**

The following assessment methods will be used: unseen written examination papers; assessment of practical classes; assessment of written assignments; assessment of oral presentations; assessment of fieldwork and related reports; assessment of practical project and related dissertation; an oral examination may be held.

Details of the assessment methods for each module are specified in the appropriate handbook for each Stage of the degree programme.

5. **Substitution of Modules**

With the permission of the Degree Programme Director candidates may substitute another module of an equivalent value and standard for any of the modules listed at any Stage of the degree programme.

6. **Fieldwork**

Compulsory modules may include fieldwork which may take place in vacations.

7. **Honours Performance**

Candidates will be assessed for Honours performance on the basis of the assessment of all the modules taken at Stage 2 plus all the modules taken at Stage 3. Stage 2 modules contribute 25 per cent towards Honours performance, whilst Stage 3 modules contribute 75 per cent towards Honours performance.

6. **Students Registering on or before September 2003**

(a) *Transfer to the Ordinary Degree Programme*

Students who do not satisfy the requirements to progress within the Honours degree programme but who do satisfy the requirements for progression within the parallel Ordinary degree in Zoology may transfer to this Ordinary degree programme at the end of Stage 1 or Stage 2, or, on tutorial advice, during Stage 2. Such transfer will be subject to the approval of the Degree Programme Director, on the recommendation of the Board of Examiners.

(b) *Transfer from the Ordinary Degree Programme*

Transfer may be permitted from the Ordinary degree programmes into an Honours degree programme within the Faculty at the discretion of the Degree Programme Director, on the recommendation of the Board of Examiners and subject to the relevant regulations for the Ordinary degree programmes in Agriculture and Biological Sciences.

Development of specific Intended Learning Outcomes occurs through the following modules (compulsory modules are in **bold text**, optional modules are in *italic text*)

| | Intended Learning Outcome | List of modules contributing to intended learning outcome |
|---|---|---|
| A1 | Knowledge of Zoology from the molecular to the community level. | Stage 1: **Form and Function - Cells and Animals; Evolution for Biologists; Behaviour and Ecology; Introductory Biochemistry for Biologists; Introduction to Genetics**; *Biodiversity of Marine Animals*<br>Stage 2: **Introduction to Molecular Biology; Animal Development;** *Animal Parasitology*<br>Stage 3: **Biology of Secretion; Behavioural Ecology; Mechanisms of Behaviour;** *Reproduction and Life History;* |
| A2 | Knowledge of the diversity of animal and of the principles used to classify them. An understanding of phylogeny and evolution | Stage 1: **Form and Function - Cells and Animals; Evolution for Biologists;** *Biodiversity of Marine Animals*<br>Stage 2: **Entomology; Vertebrate Evolution and Diversity; Population Genetics and Natural Selection**<br>Stage 3: **Behavioural Ecology;** *Ornithology* |
| A3 | An understanding of the ways that different types of animals function, including their of their physiology and behaviour. An understanding of how animals are adapted to survive and reproduce in different environments. | Stage 1: **Form and Function - Cells and Animals; Behaviour and Ecology**<br>Stage 2: **Comparative Animal Physiology**<br>Stage 3: **Mechanisms of Behaviour;** *Reproduction and Life History; Animal Ecophysiology* |
| A4 | An understanding of ecology, including of the relationships between different animals and between animals and plants. | Stage 1: **Behaviour and Ecology; Biodiversity and Conservation**<br>Stage 2: **Ecology of Populations and Communities**<br>Stage 3: **Conservation Biology Issues**; *Animal Population Dynamics; Plant-Animal Interactions* |
| A5 | Knowledge of aspects of subjects related to Zoology, such as Marine Biology or Psychology. | Stage 1: *Biodiversity of Marine Animals*; *Biological Psychology; Personality*<br>Stage 2: *Tropical Marine Environments and Ecology; Fisheries Biology and Aquaculture; Motivation*<br>Stage 3: *Advances in Marine Ecology* |
| A6 | Experience and appreciation of the operation of the scientific method, including the importance of careful observation, the formulation and testing of hypotheses, | Stage 1: **Biology Skills and Numerical Methods**<br>Stage 3: **Residential Field Course** |

| | | |
|---|---|---|
| | and the integration of the results with wider knowledge. | **(Zoology); Research Project (Zoology)** |
| A7 | An informed awareness of the relevance of Zoological Knowledge to Society and to contemporary Human problems and needs. Knowledge of legal and ethical aspects of Animal Welfare. First-hand experience of the work performed by professional biologists. | Stage 2: **Biodiversity and Conservation**<br>Stage 3: **Zoology Masterclass; Zoology Overseas; Conservation Biology Issues** |
| B1 | Experience in accessing and assessing validity of sources of zoological information. These sources include books, research literature, pubic media, and the World-Wide Web | Stage 1: **Biology Skills and Numerical Methods**<br>Stage 2: **Biology Research Communication**<br>Stage 3: **Zoology Masterclass; Zoology Overseas; Research Project (Zoology)** |
| B2 | The abilities to: make observations; and use appropriate instruments to collect data in scientific investigations. These abilities are important both for field and for laboratory work. | Stage 1: **Form and Function - Cells and Animals; Behaviour and Ecology; Introductory Biochemistry for Biologists**<br>Stage 2: **Comparative Animal Physiology;** *Entomology Field Course; Methods in Animal Behaviour*<br>Stage 3: **Residential Field Course (Zoology); Research Project (Zoology)** |
| B3 | The ability to: design experiments and surveys; and use the scientific method to undertake original investigations. | Stage 2: **Comparative Animal Physiology**<br>Stage 3: **Residential Field Course (Zoology); Research Project (Zoology)** |
| B4 | The abilities to: select and use appropriate techniques for data analysis; and present data using statistical, graphical and other techniques. | Stage 2: *Methods in Animal Behaviour*<br>Stage 3: **Residential Field Course (Zoology); Research Project (Zoology);** *Ornithology* |
| C1 | Handle data from a variety of Zoological disciplines. | Stage 3: **Zoology Overseas; Research Project (Zoology)** |
| C2 | Interpret observations and data. | Stage 2: **Comparative Animal Physiology;** *Methods in Animal Behaviour*<br>Stage 3: **Residential Field Course (Zoology); Research Project (Zoology)** |
| C3 | Appraise observations and data and produce a reasoned argument. | Stage 3: **Residential Field Course (Zoology); Research Project (Zoology)** |
| C4 | Communicate effectively about Science using both written and oral presentations. | Stage 2: **Biology Research Communication**<br>Stage 3: **Zoology Masterclass; Research Project (Zoology)** |
| C5 | Solve problems. | Stage 3: **Residential Field Course (Zoology); Research Project (Zoology)** |
| D1 | Use sources of information effectively. | Stage 2: **Biology Research Communication** |

| | | |
|---|---|---|
| | | Stage 3: **Zoology Masterclass** |
| D2 | Summarise and communicate orally, graphically and in writing in a manner appropriate to the target audience. | Stage 2: **Biology Research Communication**<br>Stage 3: **Zoology Masterclass; Research Project (Zoology)** |
| D3 | Work effectively both independently and as a member of a team. | Stage 3: **Residential Field Course (Zoology); Research Project (Zoology)** |
| D4 | Plan a programme of work so that the at work is both competent and timely. | Stage 2: **Biology Research Communication**<br>Stage 3: **Zoology Masterclass; Zoology Overseas; Research Project (Zoology)** |
| D5 | Recognize and solve problems. | Stage 3: **Residential Field Course (Zoology); Research Project (Zoology)** |
| D6 | Develop a sense of responsibility to society and the environment. | Stage 3: **Zoology Masterclass; Zoology Overseas; Conservation Biology Issues** |

## 12 Criteria for Admission:

GCSEs required: GCSE Mathematics (minimum grade C) and Chemistry (or Dual Award Science) required if not offered at A or AS level.

A-Level Subjects and Grades: BBB/BBC from 18 units including a minimum of 12 units (preferably in science subjects) from 6- or 12- unit qualifications, and preferably including A level Biology. AS level Biology will be considered if offered in combination with other science A levels. Chemistry desirable at A or AS level but not essential.

Alternative entry qualifications:

*Scottish Qualifications* AABB/BBBBB at Higher Grade, preferably including Biology, Mathematics and another science subject. Combinations of Highers and Advanced Highers accepted.

*International Baccalaureate* 30-32 points in the IB Diploma including Biology and Chemistry grade 6 or above at Higher Level.

*Irish Leaving Certificate* ABBBB at Higher Level, preferably including Biology and Chemistry.

*Access to HE Qualifications* A module in Biological Sciences is essential and Chemistry, Mathematics or Quantitative Methods are desirable (three modules at Credit grade for HEFC).

*BTEC National Diploma* - BTEC National Diploma in Applied Science, Health Studies or a land-based subject with substantial science content, at overall DMM grade.

*BTEC Higher National Diploma* Applicants offering a BTEC Higher National Diploma in a land-based, environment or science subject will be considered individually. Applicants with a Higher National Diploma in Applied Biology or Biomedical Science may be eligible for entry at Stage 2.

Admissions policy: the School of Biology adheres to the University's admissions policy.

Arrangements for non-standard entrants: Candidates with qualifications other than those specifically listed are considered on an individual basis.

## 13 Support for Students and their Learning:

*Induction*

The first week of the first semester is an Induction Week with no formal teaching. During this week all students are given detailed programme information relating to their Stage and the timetable of lectures, practical classes and tutorials. In particular, all new students are given general information about the School and their course, as described in the Degree Programme Handbook. (The International Office offers an additional induction programme for overseas students).

*Study skills support*

Students learn a range of Personal Transferable Skills, including Study Skills, as outlined in the Programme Specification.

*Academic support*
The initial point of contact for a student is with their personal tutor (see below) for more generic issues. Subsequently the Degree Programme Director or Head of School may be consulted. Issues relating to the programme may be raised at the Staff/Student Committee, for consideration by the Board of Studies if appropriate.

*Pastoral support*
All students are assigned a personal tutor whose responsibility is to monitor the academic performance and overall well-being of their tutees. If a student has serious personal problems that affect his or her academic performance, they will be referred in the first instance to the School of Biology's Senior Tutor who has responsibility for a particular year. These tutors have special training and can refer students to appropriate sources of help, which include a range of support services within the University, including the Student Advice Centre, the Student Counselling Service, the Mature Student Support Service, and a Childcare Support Officer, see http://www.ncl.ac.uk/undergraduate/support/welfare.phtml. Details of the personal tutor system can be found at http://www.ncl.ac.uk/undergraduate/support/tutor.phtml.

*Support for Special Needs*
Support for students with special needs is provided as required and the University's Disability Support Service can be consulted where appropriate. For further details see http://www.ncl.ac.uk/undergraduate/support/disability.phtml.

*Learning resources*
The University's main learning resources are provided by the Robinson and Walton Libraries (for books, journals, online resources), and Information Systems and Services, which supports campus-wide computing facilities, see http://www.ncl.ac.uk/undergraduate/support/acfacilities.phtml.
All new students whose first language is not English are required to take an English Language test in the Language Centre. Where appropriate, in-session language training can be provided. The Language Centre houses a range of resources for learning other languages which may be particularly appropriate for those interested in an Erasmus exchanges. See http://www.ncl.ac.uk/undergraduate/support/langcen.phtml.

## 14 Methods for Evaluating and Improving the Quality and standards of Teaching and Learning:

*Module reviews*
All modules are subject to review by questionnaires which are considered by the Board of Studies. Changes to modules and the introduction of new modules are considered at the School Board of Studies. Student opinion is sought at the Staff/Student Committee and by the Board of Studies. New modules and major changes to existing modules are subject to approval by the Faculty Teaching and learning Committee.

*Programme reviews*
The Board of Studies conducts an Annual Monitoring and Review of the degree programme and reports to Faculty Teaching and Learning Committee.

*External examiner reports*
External Examiner reports are considered by the Board of Studies under Reserved Business (in the absence of the student representatives). The Board responds to these reports through Faculty Teaching and Learning Committee.

*Accreditation reports*
This programme is not accredited by any professional body.

*Student evaluations*
All modules, and the degree programme, are subject to review by student questionnaires. Informal student evaluation is also obtained at the Staff/Student Committee, and the Board of Studies.

*Feedback mechanisms*
Feedback to students is effected via the Staff/Student Committee and the Board of Studies. It is also ofen made available on Blackboard Web Sites and by email.

*Faculty and University Review Mechanisms*
The Programme is subject to the University's Internal Subject Review programme, see http://www.ncl.ac.uk/internal/academic-quality/qualityhome.htm#2.

## 15 Regulation of Assessment:

*Pass Marks*
The pass mark, as defined in the University's Undergraduate Examination Conventions, is 40 (http://www.ncl.ac.uk/calendar/university.regs/ugexamconv.html).

*Course Requirements*
Progression is subject to the University's Undergraduate Progress Regulations (http://www.ncl.ac.uk/calendar/university.regs/ugcont.html) and Undergraduate Examination Conventions (http://www.ncl.ac.uk/calendar/university.regs/ugexamconv.html). In summary, students must pass 120 credits at each Stage. Limited compensation down to 35 is possible at each Stage and there are re-sit opportunities, with certain restrictions.

*Weighting of Stages*
Modules taken at Stages 2 and 3 are Honours modules and the two stages contribute to the award of the final degree in the ratio 1:3.

*Common Marking Scheme*
The University employs a common marking scheme, which is specified in the Undergraduate Examination Conventions (http://www.ncl.ac.uk/calendar/university.regs/ugcont.html), namely

| | **Honours** | **Non-honours** |
|---|---|---|
| <40 | Fail | Failing |
| 40-49 | Third Class | Basic |
| 50-59 | Second Class, Second Division | Good |
| 60-69 | Second Class, First Division | Very Good |
| 70+ | First Class | Excellent |

*Role of the External Examiner*
An External Examiner, a distinguished member of the subject community, is appointed by Faculty Teaching and Learning Committee, after recommendation from the Board of Studies. The External Examiner is expected to:

See and approve examination papers
Moderate examination and coursework marking
Attend the June Board of Examiners
Report to the University on the standards of the programme

## 16 Indicators of Quality and Standards:

Professional Accreditation Reports: *not applicable*.
Internal Review Reports
This programme is due for Internal Subject Review Semester 2, 2005-6. See:
http://www.ncl.ac.uk/internal/aqss/qsh/internal_subject_review/schedule_2002-8.pdf

Previous QAA Reports
'Organismal Bioscience' at Newcastle University was reviewed externally in October 1998 and achieved a rating of 22/24

This specification provides a concise summary of the main features of the Zoology Degree Programme and of the learning outcomes that a typical student might reasonably be expected to achieve if she/he takes full advantage of the learning opportunities provided. The accuracy of the information contained is reviewed by the University and may be checked by the Quality Assurance Agency for Higher Education.

**17 Other Sources of Information:**

The University Prospectus (see http://www.ncl.ac.uk/undergraduate/ )

The Departmental Prospectus (see http://www.ncl.ac.uk/undergraduate/course/C300 )

The University and Degree Programme Regulations (see http://www.ncl.ac.uk/calendar/pdf/uniregs.pdf and http://www.ncl.ac.uk/calendar/sae/ )

The Degree Programme Handbook: available through Blackboard and distributed as a hardcopy to students.

QAA Subject Review Report
. http://www.qaa.ac.uk/revreps/inst_reports.asp?instID=H-0154#O