PROGRAMME SPECIFICATION	

1	**Awarding Institution**	Newcastle University
2	**Teaching Institution**	Newcastle University
3	**Final Award**	B.Sc.
4	**Programme Title**	Food & Human Nutrition
5	**UCAS/Programme Code**	B4D6
6	**Programme Accreditation**	The Association for Nutrition
7	**QAA Subject Benchmark(s)**	Biosciences; Agriculture, forestry, agricultural sciences, food sciences; and Consumer sciences.
8	**FHEQ Level**	Honours
9	**Last updated**	2nd September 2013

10 Programme Aims

1. To facilitate the general higher education and intellectual development, within the context of the science of food and human nutrition, of well motivated students from diverse geographical and academic backgrounds.
2. To encourage students to develop an informed interest in the science of food, human nutrition and health and to engender an awareness of a) the impact of food production and processing on the environment and b) the central importance of food-related activities on society.
3. To produce graduates who have a) a thorough understanding of the scientific basis of food and human nutrition and of relationships between food, nutrition and human health that is informed by research b) a range of core skills including the use of communication and information technology; the ability to assemble, evaluate and use information from a variety of sources; the ability to prioritise work and to meet deadlines; the ability to work alone and in teams; and, through the use of oral, literary and/or numerical skills, the ability to analyse issues and problems, propose potential resolutions and to derive critical accounts of alternatives.
4. To lead to a qualification which meets the FHEQ at Honours level and which takes appropriate account of the subject benchmark statements in Biosciences.

11 Learning Outcomes

The programme provides opportunities for students to develop, integrate, practice and demonstrate knowledge and understanding of the range of biomedical and social science disciplines on which a sound understanding of the relationships between food, nutrition and health is based. These outcomes are referenced in the following sections to benchmark statements for Biosciences (B); Agriculture, forestry, agricultural sciences, food sciences (FS) and consumer sciences (CS).

Knowledge and Understanding

On completing the programme students should have gained and be able to demonstrate:

A1 A good knowledge and understanding of fundamental biomedical subjects including biochemistry, physiology, microbiology and genetics.
- Be able to express relevant biological reactions in chemical terms (*B*)
- Understand how the chemistry and structure of the major biological macromolecules, including proteins, carbohydrates and nucleic acids, determine their properties (*B*)
- Explain and undertake standard methods for the detection and enumeration of micro-organisms important in the food industry (*FS*)

A2 A good knowledge of human nutrition, food science and of the links between nutrition and health.
- Demonstrate understanding of the chemistry underpinning molecular interactions and the behaviour of components in food materials during processing and storage (*FS*)
- Describe biochemical, physical and biological factors underlying the synthesis and metabolism of food materials (*FS*)
- Describe physical properties of food and experimentally determine their values (*FS*)
- Explain the role of nutrients in health (*FS*)
- Describe the principles and practice of major food processing operations and food preservation systems (*FS*)

A3 A basic knowledge of molecular genetics and food biotechnology.
- Understand how the principles of genetics underlie much of the basis of modern molecular biology (*B*)

A4 A basic understanding of national and international policies relevant to food, nutrition and health.
- Explain the role of nutrients in health (*FS*)
- Explain the importance of hygiene and waste management systems for the food industry (*FS*)

A5 An appreciation of recent developments in science relating particularly to the interactions between genetic inheritance and environmental factors, including diet, which influence the risk of common non-communicable diseases.
- Explain the role of nutrients in health (*FS*)
- Describe the risks to health of key chemical contaminants of foods (*FS*)
- Understand basic principles of scientific experimentation and data analysis (B, FS), and describe a limited range of potential pitfalls relevant for investigations of the role of nutrients in health (FS)

A6 An understanding of the scientific, societal and environmental contexts in which decisions about the application of scientific developments relevant to food and human nutrition are taken.
- Describe the food law framework within which food businesses operate (*FS*)
- Describe a limited range of social and individual factors in the formation of consumer knowledge (*CS*)
- Describe a limited range of social and individual factors in consumer attitudes and choices (*CS*)
- Recognise and be able to comment on the moral and ethical issues associated with the subject (*FS*)

Teaching and Learning Methods

Teaching Methods
The primary means of imparting knowledge and understanding in all the above is through lectures supplemented, as appropriate, with practical classes, seminars and tutorials, many of which are supported through the University's virtual learning environment, Blackboard including the lecture recording system ReCap. A5 is enhanced by the undertaking of an individual research project in the final year requiring a substantial literature review and interpretation of the experimentally generated data. Visiting speakers and attendance at a scientific conference contribute to A4 – A6.

Learning Methods
Throughout the programme students are encouraged to supplement taught material by self-study of reading materials and appropriate information on the internet to which they are directed by staff. In the final year most of the directed reading is of research papers and guidance on their effective use is provided. Short tests are administered in some modules on completion of specific topics to enable students to monitor the progress of their learning. Feedback on essays and laboratory reports allows students to refine their presentation techniques in these areas and assess the level of their knowledge and understanding.

Assessment Strategy

Assessment of knowledge and understanding is by use of unseen written examinations (including essay questions, short answer and problem-solving as appropriate to the module and level of study) and by coursework (including essays, laboratory or case-study reports, in-course tests, research project work and dissertation, oral and poster presentations). The mix of examination and coursework varies as appropriate to the module but most modules include some aspect of formative assessment during the module in addition to the summative assessment.

Intellectual Skills

On completing the programme students should be able to:

B1 Develop hypotheses and design, execute and analyse data for a range of study types including laboratory-based, clinical and nutritional epidemiological studies.
- Plan, conduct and present an independent investigation with some reliance on guidance (*FS*)
- Use appropriate laboratory and field equipment competently and safely (*FS*)
- Select and apply a range of appropriate methods to solve problems (*FS*)

B2 Use statistical procedures to facilitate the design of studies and the analysis of collected data.
- Define a suitable and effective sampling procedure (*FS*)
- Recognise incomplete sets of information and propose appropriate solutions (*FS*)
- Understand risk (*FS*)
- Process and interpret data effectively (*FS*)
- Solve a range of numerical problems using appropriate techniques (*FS*)
- Select and apply a range of appropriate methods to solve problems (*FS*)

B3 Demonstrate skills in a range of quantitative and qualitative techniques used in the area of food and human nutrition.

- Safely use methods of analysis for most types of large and small molecules of relevance to food (*FS*)
- Use appropriate technology to address problems efficiently (*FS*)
- Use appropriate laboratory and field equipment competently and safely (*FS*)
- Handle computer-based information using appropriate techniques or packages (*FS*)
- Describe clearly and record accurately in the field and in the laboratory (*FS*)
- Design, apply and interpret statistically valid sensory evaluation methods to assess food quality and/or preference (*FS*)

B4 Critically evaluate data from a variety of sources

- Analyse, synthesise and evaluate information (*FS*)
- Critically appraise academic literature and other sources of information (*FS*)
- Interpret practical results in a logical manner (*FS*)

B5 Present data in written format according to accepted scientific conventions.

- Relate investigations to prior work and to reference appropriately; recognise when information is incomplete (*FS*)
- Describe clearly and record accurately in the field and in the laboratory (*FS*)
- Present research findings in a number of formats effectively and appropriately (*FS*)

Teaching and Learning Methods

Teaching Strategy
Practical classes associated with many modules during the first two years progressively develop B1 which is greatly enhanced by the individual research project in the final year. B2 and B3 are developed through specific modules (Statistical Methods, Research Methods for Food and Human Nutrition, Advanced Food Science) involving lectures followed by smaller group calculation classes, practicals or computing classes and completion of appropriate example calculations and analyses. These fundamental skills in B1, B2 and B3 are honed by practice in laboratory classes at Stage 2 and 3. The research project also makes a major contribution to B3, B4 and B5. From the first year, students are required, after appropriate guidance, to search the literature for information and submit all written work in an appropriate scientific format so that by the final year B4 and B5 are thoroughly integrated into all submitted work.

Learning Strategy
Students are encouraged to develop appropriate quantitative and practical skills (B1-B4) by monitored attendance at formal classes during the first two years and subsequently through practice and discussion with their supervisor as part of their final year research project. From the first year all written work must be submitted in an appropriate scientific format and feedback on such work enhances learning of the skill outlined in B5.

Assessment Strategy

B2 and B3 are assessed through unseen examinations and, together with B5, through coursework (laboratory reports, completion of quantitative and statistical calculation sheets, essays) during the first two years and laboratory reports from practical classes in the final year. Together with B1 and B4 these skills form a major part of the assessment of the final year research project.

Practical Skills

On completing the programme students should be able to:

C1 Critically analyse information and arguments derived from a range of sources.
- Demonstrate ability to define problems, devise and evaluate solutions to both routine and unfamiliar problems (*FS*)
- Analyse, synthesise and evaluate information (*FS*)
- Demonstrate the ability to consider issues from a range of multi-disciplinary and inter-disciplinary perspectives and to draw on appropriate concepts and values in arriving at a critical assessment (*FS*)

C2 Interpret scientific information, both quantitative and qualitative.
- Analyse, synthesise and evaluate information (*FS*)
- Integrate lines of evidence from a range of sources to support findings and hypotheses (*FS*)

C3 Derive and recognise hypotheses based on existing knowledge; to advance logical arguments, based on new or existing scientific evidence, to support or refute hypotheses; identify gaps in knowledge and propose means for filling them.
- Analyse, synthesise and evaluate information (*FS*)
- Integrate lines of evidence from a range of sources to support findings and hypotheses (*FS*)
- Demonstrate the ability to consider issues from a range of multi-disciplinary and inter-disciplinary perspectives and to draw on appropriate concepts and values in arriving at a critical assessment (*FS*)
- Relate investigations to prior work and to reference appropriately; recognise when information is incomplete (*FS*)

C4 Produce rational analyses of complex problems, in particular, those involving the application of scientific advances in the areas of food and human nutrition.
- Integrate lines of evidence from a range of sources to support findings and hypotheses (*FS*)
- Explain the role of nutrients in health (*FS*)

Teaching and Learning Methods

Teaching Strategy
Cognitive skills are developed progressively throughout the programme in modules containing practical classes, case studies, small group discussion tutorials and essays. This is a particular feature of the final year where students undertake critical reviews of recently published papers. In the final year the individual research project and its associated dissertation require students to display all skills C1-C3 and they are supported by their supervisor when gaining full confidence in their ability to do this.

Learning Strategy
In all years students are encouraged to consider information and experimental data in a critical manner and to justify interpretation by logical development of ideas and reference to known facts. Planning, executing and reporting on their final year research project enhances the learning of these skills in a less controlled environment than in previous years.

Assessment Strategy

Assessment Strategy
Cognitive skills are assessed through various forms of coursework (including laboratory reports, case studies and essays), culminating in assessment of the final year research project dissertation. In the final year, student appraisal of recently published papers is assessed according to predetermined criteria in the module Integrating Food and Human Nutrition, which includes a formal, unseen paper which also assesses these skills.

Transferable/Key Skills

On completing the programme students should be able to:

D1 Communicate clearly and effectively through written documents and oral presentations in ways that are appropriate to the target audience.
- Communicate effectively on a limited range of consumer issues (*CS*)
- Communicate effectively to audiences in written, graphical and verbal forms (*FS*)
- Use computer packages selectively to convey information effectively (*FS*)

D2 Make effective use of library and other sources of information.
- Critically appraise academic literature and other sources of information (*FS*)
- Recognise and use a range of information sources effectively (*FS*)
- Use the internet critically for communication and information retrieval (*FS*)

D3 Make effective use of communication and information technology.
- Communicate effectively on a limited range of consumer issues (*CS*)
- Recognise and use a range of information sources effectively (*FS*)
- Use computer packages selectively to convey information effectively (*FS*)

D4 Plan, organise and prioritise work effectively to meet deadlines.
- Take a responsible, adaptable and flexible approach to study and work (*FS*)
- Develop the skills necessary for self-managed and lifelong learning (eg independent study, time management, organisational skills) (*FS*)
- Take a responsible, adaptable and flexible approach to study and work (*FS*)

D5 Work independently and as part of a team.
- Contribute coherently to group discussions (*FS*)
- Listen to, and evaluate the views of others (*FS*)
- Organise a team effectively (*FS*)
- Contribute effectively to team work (*FS*)
- Identify individual and collective goals (*FS*)
- Recognise and respect the views of others (*FS*)
- Reflect on performance as an individual and team member (*FS*)
- Take a responsible, adaptable and flexible approach to study and work (*FS*)
- Understand and be able to apply professional codes of conduct (*FS*)

D6 Demonstrate problem-solving skills and initiative.
- Analyse, synthesise and evaluate information (*FS*)
- Integrate lines of evidence from a range of sources to support findings and hypotheses (*FS*)
- Demonstrate the ability to consider issues from a range of multi-disciplinary and inter-disciplinary perspectives and to draw on appropriate concepts and values in arriving at a critical assessment (*FS*)
- Relate investigations to prior work and to reference appropriately; recognise when information is incomplete (*FS*)
- Critically appraise academic literature and other sources of information (*FS*)

D7 Research employment opportunities, to prepare and submit effective applications for employment and to gain skills in effective presentations at interview.
- Identify individual and collective goals (*FS*)
- Reflect on performance as an individual and team member (*FS*)
- Develop the skills necessary for self-managed and lifelong learning (eg independent study, time management, organisational skills) (*FS*)

D8 Undertake self-appraisal skills in the area of workplace skills

- Identify individual and collective goals (*FS*)
- Reflect on performance as an individual and team member (*FS*)
- Identify and work towards targets for personal, career and academic development (*FS*)
- Accept responsibility for one's actions (*FS*)
- Analyse personal strengths and weaknesses (*FS*)

D9 Demonstrate personal achievement by preparation of a portfolio of evidence.

- Identify individual and collective goals (*FS*)
- Reflect on performance as an individual and team member (*FS*)
- Develop the skills necessary for self-managed and lifelong learning (eg independent study, time management, organisational skills) (*FS*)
- Analyse personal strengths and weaknesses (*FS*)

D10 Produce a development plan to help overcome identified skills weaknesses.

- Identify individual and collective goals (*FS*)
- Reflect on performance as an individual and team member (*FS*)
- Analyse personal strengths and weaknesses (*FS*)
- Identify and work towards targets for personal, career and academic development (*FS*)
- Develop the skills necessary for self-managed and lifelong learning (eg independent study, time management, organisational skills) (*FS*)

Teaching and Learning Methods

Teaching Strategy
Some key skills, D1-D3, are formally taught in specific, compulsory skills modules (eg. IT and Numeracy Skills for Nutrition, Introduction to Nutrition and Food Science) while the others are integrated into subject-specific compulsory modules as appropriate to meet the aims of those modules e.g. team-working in Experimental Human Nutrition, Sports and Exercise Nutrition, Advanced Food Science and in Plants as Food and D4 in the final year project. All students benefit from tutorials and one-to-one sessions with the Placement Tutor to develop D7 whilst D8 – D10 are developed in the workplace during the Placement Year under guidance from the University's City and Guilds' Tutor.

Learning Strategy
While skills D1-D3 are formally taught, and the students obtain feedback to enhance their learning as parts of individual modules, the same skills are applied in many subject-specific modules with students required to find information and give oral or written presentation throughout all years of study. In these cases the student is learning not only subject-specific information but also the generic skills described in D1-D3. Deadlines for submission of coursework are strictly enforced encouraging students to develop D4 and this is supported by guidance provided during Induction Week at each Stage of the programme. Students learn D5 and D6 as part of the work associated with their final year research project and as parts of others modules with specific and substantial assignments (Food and Human Nutrition, Human Nutrition and Health, Sports and Exercise Nutrition). In addition most practical classes require students to work in groups of two or more to carry out the experimental work and obtain data which provides an introduction to the more complex team-working skills that are developed subsequently. D4-D6 and D8-D10 are developed as part of the Placement with their workplace supervisor aiding in the learning process through regular appraisals, and for those selecting appropriate optional modules, during placements in Career Development Modules.

Assessment Strategy

Assessment Strategy
Key skills form all or part of the assessment in IT and Numeracy Skills for Nutrition as well as in Introduction to Nutrition and Food Science where much of the assessment is based on submitted coursework. In addition D1-D6 are indirectly assessed through their contribution to coursework (essays, oral and poster presentations, completion of final year research project and dissertation) in other modules. D7 is assessed by their ability to obtain a suitable Placement and D8 – D10 are assessed for the City and Guilds Licentiateship award.

12 Programme Curriculum, Structure and Features

Basic structure of the programme

The programme is a four-year full-time programme including an integral Placement Year between the second and final years.

Each non-placement year (Stage) consists of a taught component of 120 credits/year comprising modules with values of 10, 20 or 30 credits. 10 credits are associated with 100 hours of study time (including time-tabled classes and private study time).

In terms of credits, Stage 1 and 2 consists only of compulsory modules, while there is a 110:10 mix of compulsory: optional modules in Stage 3 of the programme. There are no "core" modules in this degree programme.

In Stage 3, the optional module can be freely selected from a specified list, with an option to select a module not on the list if feasible in terms of timetabling if approved (as relevant for the programme) by the Degree Programme Director.

Progression from Stages 1 and 2 to the subsequent Stage is dependent on having an overall average mark of greater than 40 and a mark of at least 40 for modules totalling at least 100 credits, although limited compensation for marks of at least 35 is permitted. Two resits are permitted for each module if necessary.

Programme Structure

In Stage 1 students are given a foundation knowledge and understanding (contributing to learning outcome A1) in subjects on which a sound understanding of the science of food, nutrition and health are built in Stages 2 and 3 (learning outcomes A2-A5). Development of some of the higher level understanding (A6) and of associated cognitive skills (C4) are begun via the module 'Introduction to Nutrition and Food Science'. An introduction to statistical methods and to information technology and numeracy contribute towards development of learning outcomes B1 and B2 and D2 and D3. Subject-specific skills, the ability to interpret scientific information and to communicate clearly (learning outcomes B1–B5, C2 and D1-D3) are each developed in several modules as students develop the ability to carry out laboratory experiments, including recording, manipulating and interpreting data, and simple literature searches and to present information in an appropriate written format.

At Stage 2 the modules provide the core knowledge and understanding of food science and human nutrition whilst extending experimental skills (learning outcomes B1, B2, C2, D4 and D5) and competency in quantitative techniques (learning outcomes B2 and B3). At this Stage students are exposed to knowledge at the forefront of some aspects of nutrition through the experiment forming the core of the Experimental Human Nutrition module (learning outcomes A5, B1 and C3). Various modules continue to develop subject-specific skills (learning outcomes B1-B5) and students develop an ability to search for and to use information from many sources and to critically evaluate data and information in terms of its quality and contribution to knowledge (learning outcomes B4 and C1-C3). Key transferable skills development (learning outcomes D1-D6) is not associated with specialised skills modules at this Stage but forms an integral part of most modules. Learning outcome D7 is developed through the dedicated tutorial programme of preparation for the Placement Year.

The Placement Year is an integral part of the degree programme occurring between Stages 2 and 3. The year allows students to experience first-hand food science and/or nutrition in an industrial, commercial or public sector environment. The Placement Year enhances the understanding of concepts and processes covered theoretically in Stages 1 and 2 and puts much of the students' previous knowledge into context. In addition to many subject specific skills which are developed (learning outcomes B1-B5) students enhance their cognitive skills (learning outcomes C1-C4) and develop additional transferable skills (D7-D10).

Stage 3 is the culmination of the degree programme with a major component being the individual research project and dissertation (undertaken in active research laboratories and supervised by a member of staff with current research activity in a related area) which requires students have an in depth knowledge of a particular subject area (learning outcomes A1 or A2) and to be aware, particularly, of current developments at the forefront of research in that area (learning outcome A5). The module 'Integrating Food and Human Nutrition' provides an opportunity for students to develop their higher level analytical/cognitive skills (learning outcome C4) and understanding (learning outcome A6) through in-depth study of the application of scientific advances in the area of food and human nutrition. Completion of the project and dissertation demands high quality subject-specific, cognitive and transferable skills (learning outcomes B1-5, C1-3 and D1-6). Lecture modules continue to develop good knowledge and understanding of key subject areas (learning outcomes A1-A5). All modules taught at Stage 3 make substantial use of original research papers to support lecture material ensuring that students are aware of current developments and are able to deal critically with such information (learning objectives A5, A6, B4, C1-4). The exam component of the module 'Integrating Food and Human Nutrition' asks broad questions with sufficient time to allow students to demonstrate their abilities to answer questions in depth, in particular demonstrating the ability to integrate knowledge and cognitive skills across subject areas (B4, B5, C1-4, D1).

Communication of information plays an important part at this Stage, further developing the students' abilities to produce written reports and essays, oral presentations using appropriate visual aids and poster presentations (learning outcomes B4, B5, C1, C2, D1- D3). Transferable skill development is integrated into most Stage 3 modules with time management (learning outcome D4) being particularly important at this Stage.

Key features of the programme (including what makes the programme distinctive)

Particular features of the programmes are:

- High content of laboratory-based practical work.
- State-of-the-art facilities for a wide range of practical activities.
- At least 4 modules unique to the programme at each of Stages 1, 2 and 3.
- Opportunity to gain workplace skills through the Placement Year.
- Dedicated tutorial programme in preparation for Placement Year.
- Opportunity to gain a recognised qualification, awarded by City and Guilds, for the Placement Year.
- Opportunity to carry out an individual research project in a dynamic research environment.
- Accredited by the Association for Nutrition, enabling the graduates to apply for Direct Entry to the UK Voluntary Register of Nutritionists at Associate level.
- Provides the appropriate basis for postgraduate study in a wide range of food and nutrition-related areas, including dietetics, food science, molecular nutrition and public health research.
- Provides the appropriate basis for a successful career in the food and nutrition-related industry, in particular areas such as new product development, food quality management and corporate social responsibility.

Programme regulations (link to on-line version)

http://www.ncl.ac.uk/regulations/programme/2013-2014/

13 Criteria for admission

Entry qualifications
Students are admitted on an individual basis but typical entrance requirements are as listed below with particular conditions tailored to each individual.

The programme is designed for students who wish to understand the science of food and human nutrition and are interested in the practical applications of this science. Success requires interest, motivation, and well-organised methodical thinking, together with a sound basic understanding of scientific principles. While the minimum qualifications are outlined below, additional qualities such as effective organisational and time-management skills or relevant practical experience as evident in the UCAS application will be considered.

Candidates should have at least GCSE Grade B in Mathematics and in Chemistry or Dual Award Science if not offered to a higher level. In addition, various combinations of higher level qualification are appropriate:

A level, Advanced Vocational Certificate of Education, AS level:
ABB normally including Biology and another science subject and excluding General Studies. Home Economics/Food Technology will be considered instead of Biology at A level. Chemistry is preferred at A/AS level but not essential. Mathematics required at GCSE (minimum grade B) if not offered at A/AS level.

Scottish qualifications:
AAABB at Higher Grade including two science subjects. Advanced Higher Biology and/or another science subject normally required. Higher Grade Chemistry desirable.

Other qualifications:
BTEC National Diploma (or other NQF Level 3 qualification): A science-related subject with substantial biology and chemistry units at overall DDM.

BTEC Higher National Diploma (or other NQF Level 4 qualification). Applicants offering Higher National Diploma will be considered on an individual basis. Entry at Stage 2 possible, subject to prerequisites

Access courses: A module in Biological Sciences is essential and modules in Chemistry, Mathematics or Quantitative Methods desirable (three modules at Distinction/Credit grade for HEFC).

International qualifications:
These are accepted subject to a minimum science requirement with each candidate considered on merit (see for example, International Baccalaureate below).

International Baccalaureate: 32-35 points normally including Higher Level Biology at grade 6 or above. Chemistry is preferred at Higher Level but not essential. Mathematics or Mathematical Studies and Chemistry required at Standard Level grade 5 if not offered at Higher Level.

Irish leaving certificate: A1A1A1B1B at Higher Level, preferably including Biology, Mathematics and another science subject.

Partners Programme:
These are accepted subject to the minimum requirements specified below and successful completion of the University's Summer School Programme.

Partners A/AS Levels and AVCE Qualifications: BCC normally including Biology and another science subject and excluding General Studies. Home Economics/Food Technology will be considered instead of Biology at A level. Chemistry is preferred at A/AS level but not essential. Mathematics required at GCSE (minimum grade B) if not offered at A/AS level.

Partners BTEC National Diploma: BTEC National Diploma (or other NQF Level 3 qualification) in a science related subject at overall MMM grade, to include biological and chemical science as essential units at Merit grade.

Admissions policy/selection tools
Offers of places are made on the basis of the UCAS form. All applicants whose qualifications appear suitable on the basis of the UCAS form are encouraged to attend an open day if possible.

Non-standard Entry Requirements
All other non-standard applications are considered on an individual basis. Applicants are encouraged to attend an open day and/or attend for interview with the Admissions Tutor. Where applicants cannot attend, telephone interviews may be used to supplement the UCAS form.

Additional Requirements
There are no additional requirements for the degree programme.

Level of English Language capability
Minimum IELTS 6.5 or equivalent for direct entry. Applicants with IELTS 6.0 will be allowed entry following successful completion of the University's pre-sessional English Course.

14 Support for Student Learning

The Student Services portal provides links to key services and other information and is available at: *http://www.ncl.ac.uk/students/*

Induction
During the first week of the first semester students attend an induction programme. New students will be given a general introduction to University life and the University's principle support services and general information about the School and their programme, as described in the Degree Programme Handbook. New and continuing students will be given detailed programme information and the timetable of lectures/practicals/labs/ tutorials/etc. The International Office offers an additional induction programme for overseas students.

Study skills support
Students will learn a range of Personal Transferable Skills, including Study Skills, as outlined in the Programme Specification. Some of this material, e.g. time management is covered in the appropriate Induction Programme. Students are explicitly tutored on their approach to both group and individual projects.

Numeracy support is available through Maths Aid and help with academic writing is available from the Writing Development Centre (further information is available from the Robinson Library).

Academic support
The initial point of contact for a student is with a lecturer or module leader, or their tutor (see below) for more generic issues. Thereafter the Degree Programme Director or Head of School may be consulted. Issues relating to the programme may be raised at the Staff-Student Committee, and/or at the Board of Studies.

Pastoral support
All students are assigned a personal tutor whose responsibility is to monitor the academic performance and overall well-being of their tutees. In addition the University offers a range of support services, including one-to-one counselling and guidance or group sessions / workshops on a range of topics, such as emotional issues e.g. Stress and anxiety, student finance and budgeting, disability matters etc. There is specialist support available for students with dyslexia and mental health issues. Furthermore, the Student Union operates a Student Advice Centre, which can provide advocacy and support to students on a range of topics including housing, debt, legal issues etc.

Support for students with disabilities
The University's Disability Support Service provides help and advice for disabled students at the University - and those thinking of coming to Newcastle. It provides individuals with: advice about the University's facilities, services and the accessibility of campus; details about the technical support available; guidance in study skills and advice on financial support arrangements; a resources room with equipment and software to assist students in their studies.

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.

All new students whose first language is not English are required to take an English Language Proficiency Test. This is administered by INTO Newcastle University Centre on behalf of Newcastle University. Where appropriate, in-sessional language training can be provided. The INTO Newcastle University Centre houses a range of resources which may be particularly appropriate for those interested in an Erasmus exchange.

15 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, or the introduction of new, modules are considered at the Board of Studies and/or the School Teaching and Learning Committee. Student opinion is sought at the Staff-Student Committee and/or the Board of Studies. New modules and major changes to existing modules are subject to approval by the Faculty Teaching, Learning and Student Experience Committee.

Programme reviews
The Board of Studies conducts an Annual Monitoring and Review of the degree programme and reports to Faculty Teaching, Learning and Student Experience Committee. The FTLSEC takes an overview of all programmes within the Faculty and reports any Faculty or institutional issues to the University Teaching, Learning and Student Experience Committee.

External Examiner reports
External Examiner reports are considered by the Board of Studies. The Board responds to these reports through Faculty Teaching, Learning and Student Experience Committee. External Examiner reports are shared with institutional student representatives, through the Staff-Student Committee.

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. The National Student Survey is sent out every year to final-year undergraduate students, and consists of a set of questions seeking students' views on the quality of the learning and teaching. The results from student surveys are considered as part of the Annual Monitoring and Review of the programme and any arising actions are captured at programme and School / institutional level and reported to the appropriate body.

Mechanisms for gaining student feedback
Feedback is channelled via the Staff-Student Committee and the Board of Studies.

Faculty and University Review Mechanisms
The programme is subject to the University's Internal Subject Review process. Every six years degree programmes in each subject area are subject to periodic review. This involves both the detailed consideration of a range of documentation, and a one-day review visit by a review team which includes an external subject specialist in addition to University and Faculty representatives. Following the review a report is produced, which forms the basis for a decision by University Teaching, Learning and Student Experience Committee on whether the programmes reviewed should be re-approved for a further six year period.

Accreditation reports
The programme is accredited by the Association for Nutrition since 2005. The current accreditation period is due for re-accreditation in 2017.

16 Regulation of assessment

Pass mark
The pass mark is 40 (Undergraduate programmes)

Course requirements
Progression is subject to the University's Undergraduate Progress Regulations and Undergraduate Examination Conventions. In summary, students must pass, or be deemed to have passed, 120 credits at each Stage. Limited compensation up to 40 credits and down to a mark of 35% is possible at each Stage and there are re-assessment opportunities, with certain restrictions.

Weighting of stages
The marks from **Stages 2 and 3** will contribute to the final classification of the degree
The weighting of marks contributing to the degree for **Stage 2** is 25% and **Stage 3** is 75%.

Common Marking Scheme
The University employs a common marking scheme, which is specified in the Undergraduate Examination Conventions, namely

	Modules used for degree classification (DC)	**Modules not used for degree classification**
<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, following recommendation from the Board of Studies. The External Examiner is expected to:

i. See and approve assessment papers
ii. Moderate examination and coursework marking
iii. Attend the Board of Examiners
iv. Report to the University on the standards of the programme

In addition, information relating to the programme is provided in:

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

The School Brochure: http://www.ncl.ac.uk/marketing/services/print/publications/ordering/)

Degree Programme and University Regulations: http://www.ncl.ac.uk/regulations/docs/

The Degree Programme Handbook

Please note. This specification provides a concise summary of the main features of the 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.

Annex

Mapping of Intended Learning Outcomes onto Curriculum/Modules

Either

Intended Learning Outcome		Module codes (Compulsory in Bold)
A1	A good knowledge and understanding of fundamental biomedical subjects including biochemistry, physiology, microbiology and genetics.	**ACE1013, BIO1004, BIO1019, ACE1052, ACE2034**
A2	A good knowledge of human nutrition, food science and of the links between nutrition and health.	**ACE1018, ACE2034, ACE2059, ACE2037, ACE2038, ACE2040, ACE2041, ACE2056, ACE3051, ACE3084, ACE3053, ACE3054, ACE3083, ACE3062, ACE3073, ACE3090**, *ACE3040, PSY3013*
A3	A basic knowledge of molecular genetics and food biotechnology.	**ACE2041, ACE2056, BIO2012, ACE3054, ACE3073**
A4	A basic understanding of national and international policies relevant to food, nutrition and health.	**ACE1018, ACE2056, ACE3083, ACE3062, ACE3084** *ACE3066*
A5	An appreciation of recent developments in science relating particularly to the interactions between genetic inheritance and environmental factors, including diet, which influence the risk of common non-communicable diseases.	**ACE1018, ACE2037, BIO3017, ACE3051, ACE3084, ACE3053, ACE3083, ACE3090, Placement Year**
A6	An understanding of the scientific, societal and environmental contexts in which decisions about the application of scientific developments relevant to food and human nutrition are taken.	**ACE1018, BIO2012, BIO3017, ACE3083**, **ACE3084,** *ACE3040, PSY3013*
B1	Develop hypotheses and design, execute and analyse data for a range of study types including laboratory-based, clinical and nutritional epidemiological studies.	**ACE1018, MAS1401, ACE2037, ACE2038, ACE2040, ACE2041, ACE3090, ACE3073**
B2	Use statistical procedures to facilitate the design of studies and the analysis of collected data.	**MAS1401, ACE2059, ACE2037, ACE2058, ACE3073, ACE3090**
B3	Demonstrate skills in a range of quantitative and qualitative techniques used in the area of food and human nutrition.	**BIO1019, ACE2037, ACE2038, ACE2040, ACE2041, ACE2058, ACE3073, ACE3090**
B4	Critically evaluate data from a variety of sources.	**ACE1018, ACE2034, ACE2058, BIO2012, ACE3051, ACE3084, ACE3053, ACE3054, ACE3083, ACE3062, ACE3073, ACE3090, Placement Year,** *ACE3066, PSY3013*
B5	Present data in written format according to accepted scientific conventions.	**ACE1018, BIO1019, ACE1023, BIO2012, ACE2034, ACE2037, ACE2038, ACE2040, ACE2041, ACE2056, ACE2058, ACE3051, ACE3084, ACE3053, ACE3054, ACE3083, ACE3062, ACE3073, ACE3090, Placement Year,** *PSY3013*
C1	Critically analyse information and arguments derived from a range of sources.	**ACE1018, ACE2034, ACE2059, ACE2056, ACE2058, BIO2012, ACE3051, ACE3084, ACE3053, ACE3054, ACE3083, ACE3062, ACE3073, ACE3090, Placement**

		Year, *PSY3013*
C2	Interpret scientific information, both quantitative and qualitative.	**ACE1018, BIO1019, BIO1004, MAS1401, ACE2034, ACE2059, ACE2037, ACE2038, ACE2056, ACE2040, ACE2041, ACE2058, BIO2012, ACE3051, ACE3084, ACE3053, ACE3054, ACE3083, ACE3057, ACE3062, ACE3073, ACE3090, Placement Year,** *ACE3040, ACE3066, PSY3013*
C3	Derive and recognise hypotheses based on existing knowledge; to advance logical arguments, based on new or existing scientific evidence, to support or refute hypotheses; identify gaps in knowledge and propose means for filling them.	**ACE2034, ACE2037, ACE2038, ACE2040, ACE3051, ACE3084, ACE3053, ACE3054, ACE3083, ACE3062, ACE3073, ACE3090, Placement Year,** *ACE3066, PSY3013*
C4	Produce rational analyses of complex problems, in particular, those involving the application of scientific advances in the areas of food and human nutrition.	**ACE3051, ACE3084, ACE3053, ACE3054, ACE3083, ACE3062, ACE3090,** *PSY3013*
D1	Communicate clearly and effectively through written documents and oral presentations in ways that are appropriate to the target audience.	**ACE1013, ACE1018, BIO1019, MAS1401, BIO1004, ACE1052, BIO2012, ACE2034, ACE2037, ACE2038, ACE2056, ACE2040, ACE2041, ACE3051, ACE3084, ACE3053, ACE3054, ACE3083, ACE3062, ACE3073, ACE3090, Placement Year***, ACE3066, PSY3013*
D2	Make effective use of library and other sources of information.	**ACE1013, ACE1018, BIO1019, BIO1004, ACE1052, ACE2034, ACE2059, ACE2037, ACE2038, ACE2056, ACE2040, ACE2041, BIO2012, BIO3017, ACE3051, ACE3084, ACE3053, ACE3054, ACE3083, ACE3062, ACE3073, ACE3090,** *ACE3040, ACE3066, PSY3013*
D3	Make effective use of communication and information technology.	**ACE1018, ACE1023, MAS1401, ACE2058, ACE3051, ACE3053, ACE3054, ACE3083, ACE3062, ACE3090, Placement Year,**
D4	Plan, organise and prioritise work effectively to meet deadlines.	**ACE1018, BIO1019, BIO1004, ACE1023, ACE1052, ACE2037, ACE2038, ACE2040, ACE3051, ACE3053, ACE3054, ACE3083, ACE3062, ACE3073, ACE3090, Placement Year,** *ACE3066, PSY3013*
D5	Work independently and as part of a team.	**ACE1018, ACE2034, ACE2037, ACE2038, ACE2056, ACE2040, ACE2041, ACE3051, ACE3053, ACE3054, ACE3083, ACE3062, ACE3073, ACE3090, Placement Year,** *ACE3066, PSY3013*
D6	Demonstrate problem-solving skills and initiative.	**ACE2058, ACE3073, ACE3090, Placement Year**
D7	Research employment opportunities, to prepare and submit effective applications for employment and to gain skills in effective presentations at	**Placement Year**

	interview.	
D8	Undertake self-appraisal skills in the area of workplace skills.	**Placement Year**
D9	Demonstrate personal achievement by preparation of a portfolio of evidence.	**Placement Year**
D10	Produce a development plan to help overcome identified skills weaknesses.	**Placement Year**