



Queen Margaret University

EDINBURGH

Programme Specification

1	Awarding Institution	Queen Margaret University
2	Teaching Institution	Queen Margaret University
3	Professional body accreditation	None
4	Final Award	BSc (Honours) Nutrition and Food Science
	Subsidiary exit awards	Cert (HE), Dip (HE), BSc Nutrition and Food Science
5	Programme Title	BSc (Honours) Nutrition and Food Science
6	UCAS code (or other coding system if relevant)	
7	SCQF Level	10
8	Mode of delivery and duration	FT/PT
9	Date of validation/review	8 th April 2014

10. Educational Aims of the programme

This degree programme involves the study of human nutrition and food science and aims to produce graduates equipped for careers in the food industry and further research.

Programme Aims:

1. To provide a programme of study that develops a sound understanding of the issues and concepts related to human nutrition and food science.
2. To develop the ability to integrate both the contributory disciplines of nutrition and food science in the analysis and interpretation of factors influencing the maintenance and disturbance of the body's functions and overall health.
3. To develop in students the capacity for critical, analytical, reflective and independent thinking so that they become more effective problem solvers and continuing learners both as students and in their subsequent careers.
4. To encourage a research mindedness on the part of students so that they may better understand and evaluate relevant research, compare merits of alternative hypotheses and be able to undertake research themselves.
5. To facilitate the progressive development in students of a range of transferable skills relevant to the world of work including the commitment to life-long learning and a professional and ethical attitude to working.
6. To develop experimental and practical skills related to their field of study with associated skills in design of investigations, data collection, analysis and reporting.
7. To understand the role of the food scientist, within the food industry.

11. Benchmark statements/professional and statutory body requirements covered by the programme

There are no statutory body requirements for nutrition and food science.

12. Learning Outcomes of the Programme

On completion of the course the student will be able to:

1. Demonstrate the ability to integrate both the contributory disciplines of nutrition and food science in the analysis and interpretation of factors influencing the maintenance and disturbance of the body's functions and overall health
2. Analyse, interpret and evaluate data and information both within and across disciplines.
3. Demonstrate research mindedness through the ability to evaluate current research and to undertake research themselves.
4. Demonstrate the capacity for sustained independent work, problem solving and management of their own learning.
5. Display competency in a range of transferable skills relevant to the world of work.
6. Demonstrate awareness of the role of the food scientist, within the food industry.

13. Teaching and learning methods and strategies

Our learning and teaching strategies aim to employ effective methods of achieving programme and module aims while encouraging flexibility and innovation in meeting student requirements. Thus the student learning experience encompasses a variety of forms of learning/ teaching selected to be appropriate to the particular subject and its level of the course. We appreciate that it is important to continue efforts to improve and develop, especially in times of change and an ever increasing pressure on resources. We continue to use a wide range of learning and teaching formats developed as appropriate to particular modules and levels of the programme.

We believe that this Honours degree programme in nutrition and food science should encourage and expect the development in students of critical and creative thinking and the ability for independent work. Developing these attributes, which are at the core of SCQF Level 10, will enable them as graduates to continue to develop intellectually, taking responsibility for their own life-long learning appropriate to their career paths, a core feature of all our professional benchmarking documents. To this end, student centred learning is an essential feature of the programme and is introduced progressively, becoming predominant in later levels.

Such student-centred learning activities vary in format and extent, taking into account the particular topic and the developmental stage of the student or cohort. At early stages they may be undertaken within a framework designed largely by staff but progressively students and staff will negotiate learning targets and contracts. At later levels students are given freedom and responsibility to structure their own learning commitments through choices provided by specific module assessment options.

Formal lectures still have a role especially in providing framework knowledge and concepts. They are retained in the new programme though significantly reduced compared to previous practice. Participatory forms of learning/ teaching including laboratory practicals, computer-based workshops, tutorials, problem solving exercises, group work, directed and independent study, and group or individual presentations are key elements of the course.

A potential advantage of student-centred learning, including problem solving, is that it involves more active participation by students and encourages deeper learning – one of the key principles of the QELTA strategy. However, we are aware that for some stages or aspects of the curriculum a more structured, staff-led delivery can make an important contribution to the achievement of learning objectives. We do not believe the two approaches to be mutually exclusive but complementary approaches to learning/ teaching when used in suitable balance.

In particular, at the earlier levels we believe that a greater proportion of structured staff support and guidance in learning is appropriate than is the case in Levels 3 and 4. We recognise that learning strategies such as problem-based learning are more effective with a broad knowledge base, nevertheless, student centred learning is introduced in Level 1 with progressively greater emphasis thereafter. Tutorials, seminars and workshops in which student participation is essential, with staff mainly facilitating and guiding, are used at all levels to involve students more actively in the learning process.

As students progress, the shift in responsibility from staff to students in setting and achieving learning objectives is reflected in the balance of forms of learning and assessment and greater variety of assessment methods. However it is encouraged early in the programme using a problem based group approach in modules such as the Integrating module at levels 1 and 2. This engenders cohort learning in these introductory levels and is further developed in later levels where there is an emphasis on less formal lecture contact and more independent and directed learning with the curriculum being driven by the published evidence base. This is reinforced by encouraging attendance at the school research seminar and public lecture series at the University. Developing students as independent thinkers with the ability to have generic graduate skills as well as programme and professional specific skills entails both formal and informal introduction to the extent of the learning resource centre (library) and the available information technology. The essential practical and skills requirement must take on a similar development.

Various modules progressively develop laboratory and/or professional skills; practice in research/ professional communication and give further valuable experience in investigative techniques, problem solving, experimental design and analysis/ interpretation of data. These in turn support the Level 4 project which involves experimental design, practical investigation and selection of methods of data collection/ analysis. The independent work required, the analysis and interpretation of data and comparison of project findings with published work are combined with the rigour of writing a project report. Thus the project represents the culmination of a student's individual research awareness and ability as an undergraduate.

As students of nutrition and food science, a key part of the curriculum is enquiry and research. Research awareness and ability are also important attributes of an Honours graduate, particularly in science-based degrees and for evidence-based practice. This theme begins in Level 1 where inputs on principles of investigation and data handling which help to develop basic understanding of the research process and begin to integrate formally concepts for example in microbiology with data handling derived from real experiments (integration of the modules microbiology, human physiology with key investigative skills 1). At all levels, references and research publications appropriate to the stage of learning are used to support students in lectures, tutorials, workshops and problem based exercises. These approaches encourage a research mindedness in students and the ability to critically evaluate research findings. The teaching staff have considerable research experience across a number of disciplines which strengthen these research teaching linkages.

We are mindful of developing the professional graduate as well as the scientific one. We address this by encouraging students through modules such as the level 3 professional module to understand the need for appropriate ethical, social and professional conduct. This is one example of how we are developing professionalization in our students. This activity begins in level one where the personal development portfolio PDP is introduced in KIS1. Whilst this is the students responsibility it is supported through the PAT system where staff help in identifying the necessity for reflecting on academic performance. Level 2 (KIS2) progresses the PDP on a formal basis and this reflection on performance and behaviour provides the pre-requisites for the professional module content in Level 3. This development theme is intended to provide the student with the ability to plan for their future personal, educational and career development.

Our learning/ teaching strategies also include appropriate provision and employment of learning resources such as independent learning packs, library-based materials and web-based facilities (e-journals, databases etc). To support and encourage studies in general and student centred learning in particular, induction training in effective library usage and IT skills is provided at Level 1. Opportunity for the skills necessary to find and evaluate information are progressively developed throughout the programme. Finding credible information, how to conduct an effective search strategy, scientific literature databases and software such as reference manager being introduced to students in levels 1, 2 and 3. During the programme students are encouraged and expected to access the University's learning resource centre and formal sessions on searching and database use are integral to the module content in KIS1, KIS2 and Dissertation.

All modules have a dedicated Hub module page which provides the student with all relevant information on its aims and objectives, content and materials and assessment procedures. The curriculum for the nutrition and food science undergraduate programme satisfies that of the Biosciences Benchmarking Statements (2007) and the Agriculture, horticulture, forestry, food and consumer sciences (2009).

14. Assessment strategies

Our approach to assessment incorporates a variety of assessment methods. Formal examinations ranging from MCQ tests or short answer formats to questions requiring discursive answers are employed and are useful to assess knowledge and understanding of subject matter across the syllabus at a certain point in a programme. They are used in our programme when considered appropriate, and proportionately more at earlier levels, but a variety of assessment methods other than examinations are also employed. Generally there is one assessment per 10 credit module unless there is a requirement for both theoretical and practical learning outcomes to be assessed when exceptionally up to two may be allowed.

Assessment methods other than unseen examinations used include essays, laboratory reports, activity logs, individual and group projects, research protocols, problem solving exercises, open-book exams, seminar and poster presentations, group assessment and peer review. These can assess a range of different qualities and types of work confirming the development of a key skill-mix in our students.

We have incorporated formative practical laboratory examinations to ensure students can fulfil the practical component required for modules such as biochemistry. This also provides assurance that all students can participate in essential practical and experimental techniques in later group-led modules.

To maximise learning from returned assignments students are given written feedback on their work. Assessment performance in general, including examinations, is discussed periodically with the personal academic tutor and forms the basis of the PDP in early levels.

Students are given written details of their assessment schedule at the start of each academic year with any adjustments published via announcements on module home pages or e-mail. Feedback from marked assessments allows significant developments in learning and the standard feedback proforma used are appropriate for the nature of the assignment.

Established procedures are in place for students with any special requirements for assessment including the use of a computer to write examinations, scribe or extended examination time as required. Any student can apply for extension to assignment deadlines for valid reasons (such as certificated illness).

15. Programme structures and features, curriculum units (modules), credits and award requirements (including any periods of placement)

The BSc (Hons) Nutrition and Food Science programme covers a broad spectrum of subjects in Levels 1 & 2 but develops in Levels 3 & 4 into a programme where the Nutrition broadens to include both Nutrition and Food Science

Table 1 Curriculum

	Credits	Semester 1	Semester 2	Coordinator
Level 1				
Biochemistry	20	√	√	JMcK
Cell Biology & human Physiology	20	√	√	MW
Developmental Biology & Ageing	10	√		DMcB
Introduction to Food and Nutrition	10	√		JJ
Key Investigative Skills	10	√5	√5	EB
Microbiology	10	√5	√5	IG
Genetics	10		√	MW
Health & Society	20	√	√	SS
Integrating Module	10		√	IG
Level 2				
Pharmacology	20	√	√	DMcB
Systems Biology	20	√	√	JMcK
Immunology	10		√	LF
Key Investigative skills 2	10	√		EB
Molecular Biology	10	√		MW
Nutrition	20	√	√	EB
Introduction to Food Science	10	√		MC
Integrating module	10		√	IG
Professional Development PDSA	10		√	KA
Level 3				
Clinical Sciences for food Science	10	√5	√5	LF
Food science	20	√20		MC
Applied Nutrition	20	√	√	SD
Public Health Practice	10	√		MC
Food Analysis lab	10	√		KA
Dissertation	10		√	IG
Professional Module	10		√	MC(SD,EB)
Epidemiology & Health	10		√	MC
Logistics & supply chain management	20		√20	MP
Level 4				
Honours Project	40		√	MW
Research & Professional Communication	20		√	LF/MW
Product Development	10	√		MC
Advances in Food Science	10	√		MC
Food & Nutrition Policy	10	√		SD
Food Business Development	10	√		JMcK
Sustainable Consumption	20	√		MP

16. Criteria for admission

Typical entry

- Scottish Higher: 195 UCAS Tariff points (BBB or other grades giving equivalent points)
- A Level: 200 UCAS Tariff points (BB or other grades giving equivalent points)

Additional requirements

- Biology or Chemistry and preferably one other science at Higher or A Level (which may include Mathematics, Home Economics or another relevant science).
- Chemistry, Biology, Mathematics and English should normally be held at least to S/Intermediate2/GCSE or equivalent.

FE & Access students

- Year One Entry: We welcome applications from students from science based Access/Foundation Courses that include adequate Biology and Chemistry*.
- Year Two Direct Entry: Applicants with an HNC in Applied Sciences or equivalent are considered*.
- Year Three Entry: Applicants with an HND in Applied Biological Sciences or equivalent are considered*.
- *Each application is assessed on its individual merits and prospective students are encouraged to call the Admissions Tutor to discuss the options.

Over and above these requirements the standard precepts of the University Admissions Regulations apply. These can be found on the QMU Quality website at: <http://www.qmu.ac.uk/quality/documents/Admission.pdf> . Specific mention is made in Section 7 of the institutional Admissions Regulations regarding the admission of disabled applicants.

17. Support for students and their learning

The BSc (Hons) Nutrition and Food Science Programme provides the following student support:

- Personal Academic Tutors
- Personal Development Portfolios
- Student handbooks
- Access to Student Learning Services, Library and IT support
- Access to Student Services: careers, counselling, disability advice
- Representation through Student-Staff Committees

18. Quality Assurance arrangements

This programme is governed by QMU's quality assurance procedures. See the QMU website for more detail: <http://www.qmu.ac.uk/quality/>