PROGRAMME SPECIFICATION	

1	**Awarding Institution**	Newcastle University
2	**Teaching Institution**	Newcastle University
3	**Final Award**	MSc
4	**Programme Title**	Medicinal Plants and Functional Foods
5	**UCAS/Programme Code**	5168F/P
6	**Programme Accreditation**	N/A
7	**QAA Subject Benchmark(s)**	N/A
8	**FHEQ Level**	7
9	**Date written/revised**	February 2010

10 Programme Aims

1. To provide graduates with the necessary skills and knowledge to understand the processes involved in the study and utilisation of medicinal plants and functional foods.
2. To enable graduates to analyse practical data relating to the identification of bioactive components and functional ingredients for incorporation in to novel products.
3. To provide graduates with a knowledge of the legal requirements for the production of novel products containing bioactive and/ or functional properties.
4. To provide graduates with practical field and laboratory experience in techniques applicable to the isolation, identification and quantification of novel components with bioactive and/ or functional properties.
5. To provide a programme which will meet Master's Level (M, Level 7) of the Framework for Higher Educational Qualifications for England, Wales and Northern Ireland.

11 Learning Outcomes

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas.

Knowledge and Understanding

On completing the programme students should develop and demonstrate:

A1 An advanced historical perspective of the development of medicines and food

A2 An advanced systematic and critical in-depth understanding of the factors that affect the quality, safety and efficacy of medicinal plant and functional food products

A3 An advanced knowledge and understanding of the techniques and legislation required for production, evaluation and marketing of medicinal plants and functional foods.

A4 An advanced knowledge and understanding of techniques required for discovering and evaluating novel molecules for a range of diseases, and assessing the benefits of medicinal plants and functional foods in disease prevention and other aspects of improved health

A5 An advanced knowledge and understanding of aspects of conservation, biodiversity and laws governing intellectual property rights and protection of indigenous knowledge, depending on optional modules chosen.

Teaching and Learning Methods
The primary means of imparting fundamental knowledge and understanding in the core areas listed above in through lectures, enhanced as appropriate, by seminars, laboratory and field classes, and students' private study. The Dissertation (60 credits research project) enables an in-depth and extensive literature review, project/ experimental design, data gathering analysis/ assessment and interpretation as well as the supervised development and management of knowledge in the context of a location of interest to the student giving the student the opportunity to extend their knowledge and practical application in the core materials covered by the programme. Optional modules further enable students to concentrate on advanced specialist material of individual interest.
Assessment Strategy
Knowledge and understanding are assessed by: unseen written examinations held at the end of each module, continuous assessment (written reports, oral presentations) and a final (60 credit) dissertation based on individual research. At the discretion of the external examiner, a *viva voce* may also be conducted to clarify, where necessary, the student performance.
Intellectual Skills
On completing the programme students should be able to: **B1** Research and adopt a critical and systematic assessment of the disciplines that comprise the knowledge base for the study and utilisation of medicinal plants and functional foods. **B2** Critically appraise the quality of data and information offered from different sources. **B3** Assess the potential impact of the current knowledge base and future development on human health and society (ethics and biotechnology) **B4** Conduct research either individually or as part of a team, through literature review, research design, data collection, analysis, synthesis and reporting. **B5** Critically evaluate current research and advanced scholarship in Medicinal Plants and Functional Foods **B6** Apply knowledge and understanding to practical issues in Medical Plants and Functional Foods
Teaching and Learning Methods
Intellectual skills are developed through modules containing seminars, tutorials, case studies and small group discussions. Typically, lecture material will include most recent research that offers new or challenging insights to existing problems and encourages students to take a critical approach to the evaluation of current knowledge via specific topic based group discussions or seminars.
Assessment Strategy
Individual research and work on assignments, projects, oral presentations and Dissertation develop and assess all the skills listed above.
-Practical Skills
On completing the programme students should be able to: **C1** Design feasible research proposals and conduct research on a specific subject related to Medicinal Plants and Functional Foods **C2** Deploy a range of qualitative and quantitative techniques to analyse and interpret data **C3** Present primary and research findings in oral and written formats
Teaching and Learning Methods
The compulsory modules are important in enhancing the practical skills listed above. Field courses and laboratory assignments, independent study, literature reviews, and the design of research projects are important features of skills development.
Assessment Strategy
Assignment reports, practical reports, project proposals, seminars and presentations and the MSc Dissertation are the main methods of assessment for practical skills.
Transferable/Key Skills
On completing the programme students should be able to:

D1 Effectively communicate scientific information via oral and written formats (reports, dissertation)
D2 Design and conduct a research assignment/ project through literature reviews, experimental design, data analysis, interpretation and reporting, and where appropriate are competent in clinical trials design.
D3 Network with SMEs working in the areas of medicinal plants and functional foods
D4 Work independently and contribute effectively to group activities
D5 Use library and other information sources and resources (IT) skilfully and appropriately
D6 Network effectively with potential Industry based project supervisors

Teaching and Learning Methods

The teaching of key skills is an important part of the MSc programme and is associated with many modules. Verbal presentations and critical feedback are encouraged and enhanced in seminars and tutorials. Literature reviews, assignments, reports, design and conduct of research projects, and the Dissertation teach students the importance of communications skills, problem solving, independent study and originality, IT sources and resources as well as professionalism in the implementation and presentation of knowledge.

Assessment Strategy

Key skills are rarely assessed by formal examination. Reports, project proposals, and the MSc Dissertation, assessed seminar and oral presentations and *viva voce* examination are the main methods of assessment.

12 Programme Curriculum, Structure and Features

Basic structure of the programme

The programme is available for study in both full-time (one-year) and part-time (two-years) modes. It is a modular Masters degree programme (180 credits) based in the School of Agriculture, Food and Rural Development. It conforms to the modular structure of other MSc programmes taught in the School of Agriculture, Food and Rural Development and is delivered through inter-school/ inter-faculty collaboration. It consists of 120 credits in the taught component followed by a research Dissertation (ACE8095) worth a further 60 credits which is undertaken between April and September. Of the taught modules, 90 credits are compulsory modules appropriate for the focus of the degree, whilst the remaining 30 credits are chosen from options offering flexibility and opportunities for personal specialisation and career positioning.

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

This MSc degree utilises a wide range of expertise available in the Faculty of Science and Engineering and elsewhere in the Newcastle University and draws upon close collaboration achieved between the Schools of Agriculture, Food and Rural Development, Biology, Natural Sciences-Chemistry, Historical Studies and Law.

It is innovative, adopting an holistic interdisciplinary study of subjects from these various schools/ faculties that have until now been taught as mutually exclusive areas of study rather than integrated components of a whole.

Optional modules allow student to develop specialist interests and enhance their employment opportunities in specific areas.

Practical skills in laboratory classes and field courses and the MSc project provide practical experience in the study of medicinal plants and functional foods.

The Dissertation provides the students with a unique experience of designing and undertaking a research project in collaboration with an SME with an interest in Medicinal Plants and Functional Foods.

Programme regulations (link to on-line version)

http://www.ncl.ac.uk/regulations/programme/2010-2011/sage.php

13 Criteria for admission

Entry qualifications
A 2nd class degree from a UK university, or its overseas equivalent, is normally the minimum qualification for entry. Preferred first-degree subjects are in nutritionist, biology, agriculture, chemistry, pharmacology and other medical & health sciences. Where applicants do not hold a science degree, their wider background and qualifications will be taken in to account. This should satisfy an expected demand from students from a wide variety of academic backgrounds.

Admissions policy/selection tools
Offers of places will be made to suitably qualified candidates based on information provided on the application form and conditional upon a satisfactory reference and upon the applicant achieving a minimum of a 2nd class degree, if they do not hold such a degree at the time of the application

Non-standard Entry Requirements
Applicants who hold non-standard qualifications, and/or have relevant experience, will be considered on an individual basis.

Additional Requirements
None

Level of English Language capability
Applicants for whom English is not a first language must provide evidence of a satisfactory command of English, preferably by means of a TOEFL score of 575 or greater, or by an IELTS score of 6.5 or greater.

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 (see http://www.ncl.ac.uk/international/

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. Further details are available at:

http://www.ncl.ac.uk/about/campus/facilities/list/maths-aid . Help with academic writing is available from the Writing Centre. Details can be obtained from Alicia.Cresswell@ncl.ac.uk

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. Details of the personal tutor system can be found at http://www.ncl.ac.uk/undergraduate/support/tutor.htm
In addition the University offers a range of support services, including the Student Advice Centre, the Counselling and Wellbeing team, the Mature Student Support Officer, and a Childcare Support Officer, see
http://www.ncl.ac.uk/about/campus/facilities/list/disability+support+service

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. For further details see
http://www.ncl.ac.uk/about/campus/facilities/list/disability+support+service

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/facilities/index.htm

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. See
http://www.ncl.ac.uk/langcen/index.htm

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. 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 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. The Board responds to these reports through Faculty Teaching and Learning 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 the students' views on the quality of the learning and teaching in their HEIs. Further information is at www.thestudentsurvey.com/ With reference to the outcomes of the NSS and institutional student satisfaction surveys actions are taken at all appropriate levels by the institution.

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, see http://www.ncl.ac.uk/aqss/qsh/internal_subject_review/index.php

Accreditation reports
None of the programmes are accredited.

16 Regulation of assessment

Pass mark
The pass mark is 50%

Course requirements
Progression is subject to the University's Masters Degree Progress Regulations, Taught and Research and Examination Conventions for Taught Masters Degrees. Limited compensation up to 40 credits of the taught element and down to a mark of 40 is possible and there are reassessment opportunities, with certain restrictions.

The University employs a common marking scheme, which is specified in the Taught Postgraduate Examination Conventions, namely:

Summary description applicable to postgraduate Masters programmes		**Summary description applicable to postgraduate Certificate and Diploma programmes**	
<50	Fail	<50	Fail
50-59	Pass	50 or above	Pass
60-69	Pass with Merit		
70 or above	Pass with Distinction		

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:

I. See and approve examination 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 (see http://www.ncl.ac.uk/postgraduate/)

The School Brochure (contact enquiries@ncl.ac.uk)

The University Regulations (see http://www.ncl.ac.uk/regulations/docs/)

The Degree Programme Handbook (see : http://www.ncl.ac.uk/afrd/postgrad/)

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

		Intended Learning Outcomes			
Module	**Type**	**A**	**B**	**C**	**D**
ACE3054	Compulsory	1,2	1, 2, 5, 6	2, 3	1, 2, 4, 5
ACE8022	Compulsory		1, 2, 3, 4, 5, 6	2, 3	1, 2, 4, 5
ACE8051	Compulsory	2, 3, 4, 5	1, 2, 3, 4, 5, 6	2, 3	1, 2, 4, 5
ACE8052	Compulsory	1, 5,	1, 2, 3, 4, 5, 6	2, 3	1, 2, 4, 5
ACE8053	Compulsory	2, 3, 4	1, 2,3, 4, 5, 6	2, 3	1, 2, 4, 5
ACE8095	Compulsory		1, 2, 3, 4, 5, 6	1, 2 , 3	1, 3, 5, 6
CHY8102	Compulsory		1, 2, 3, 4, 5, 6	2, 3	1, 2, 4, 5
ACE3051	Optional		2, 3, 4, 5, 6	2, 3	2, 4, 5
ACE3053	Optional	4,	1, 3, 4, 5, 6	2, 3	1, 2, 4, 5
MMB8001	Optional	2, 3, 4, 5,	1, 2, 3, 4, 5, 6	2, 3	1, 2, 4, 5
LAW8038	Optional	5,	1, 2, 3, 4, 5, 6	2, 3	1, 2, 4, 5
LAW8042	Optional	5,	1, 2, 3, 4, 5, 6	2, 3	1, 2, 4, 5
LAW8044	Optional	5,	1, 2, 3, 4, 5, 6	2, 3	1, 2, 4, 5
MED8016	Optional	3, 5,	1, 2, 3, 4, 5, 6	2, 3	1, 4, 5
SHS8024	Optional	1	1, 2, 3, 4, 5, 6	2, 3	1, 2, 4, 5