MSc in Horticulture
For students entering Part 1 in 2011/2

Awarding Institution:	University of Reading
Teaching Institution:	University of Reading
Relevant QAA subject Benchmarking group(s):	
Faculty:	Life Sciences Faculty
Programme length:	1 years
Date of specification:	23/Aug/2011
Programme Director:	Dr Andrew Daymond
Programme Advisor:	
Board of Studies:	MSc Horticulture
Accreditation:	

Summary of programme aims
The aim of the course is to provide advanced instruction in horticulture and research experience in an area of particular interest to the student. The expected outcomes are that students should acquire and demonstrate:

- An understanding of the principles and theoretical background knowledge needed for an understanding of horticulture.
- A working knowledge of the practical techniques used in horticulture.
- An appreciation of the environmental and ethical issues associated with growing horticultural crops.
- An understanding of the aims and needs of horticultural enterprises to develop new products.
- A capacity to undertake research in horticulture.

Transferable skills
As part of this programme students are expected to gain or enhance their experience and competences in the following skills: IT (word-processing, use of spreadsheets and databases, use of Web resources), data analysis, scientific writing, oral presentations, team working, problem solving, use of library resources and time management.

Programme content
Compulsory modules (160 credits)

Code	*Module title*	*Credits*	*Level*
ASMC01	Quantitative Methods for the Life Sciences	10	7
BIMEG5	Horticultural Crop Production	10	7
BIMEH1	Principles of Horticulture and Seminar Series	10	7
BIMER8	Organic and Sustainable Horticulture	10	7
BIMES3P	Field Course	10	7
BIMES8	Controlled Environment Technology	10	7
BIMEW7	Horticultural Crop Technology	10	7
BIMEZ7	Pests and Diseases of Horticultural Crops	10	7
BIMHPR	Research Project	60	7
BIMPI12	Research and Professional Skills	20	7

Optional modules (20 credits)

AP3A76	Principles and Practices of Biological Control	10	7
APMA41	Agriculture in the Tropics	10	7
APMA62	Nematology	10	7
APMA89	Water, Agriculture and Irrigation	10	7
APMA90	Climate Change and Food Systems	10	7
APMAHRM2	Human Resource Management	10	7
BIMEA7	Environmental and Ecological Weed Management	10	7
BIMEL7	Plants and Climate	10	7
BIMEY7	Living Landscapes	10	7

Part-time or modular arrangements

There are no part-time arrangements for this degree programme.

Progression requirements

Assessment and classification
The teaching is organised in modules (totalling 180 credits) that involve a combination of lectures, tutorials, workshops, seminars, and practical sessions. Modules taken largely in the autumn and spring terms (120 credits) will be assessed by a mixture of coursework and formal examinations. The assessment of the remaining 60 credits will be of the dissertation.
The University's taught postgraduate marks classification is as follows:
Mark Interpretation
70 - 100% Distinction
60 - 69% Merit
50 - 59% Good standard (Pass)
Failing categories:
40 - 49% Work below threshold standard
0 - 39% Unsatisfactory work
For Masters Degrees
To pass the MSc students must gain an average mark of 50 or more overall in 180 credits, including a mark of 50 or more for the dissertation. In addition the total credit value of all modules marked below 40 must not exceed 30 credits and for all modules marked below 50 must not exceed 55 credits. A minimum average mark of 50% is required in the compulsory modules.
Students who gain an average mark of 70 or more overall including a mark of 60 or more for the dissertation and have no mark below 40 will be eligible for a Distinction. Those gaining an average mark of 60 or more overall including a mark of 50 or more for the dissertation and have no mark below 40 will be eligible for a Merit.
Students failing to meet requirements of the Masters degree may be eligible for a Postgraduate Diploma or Certificate. For this, students must gain an average mark of 50 or more over 120 credits (Diploma) or 60 credits (Certificate). In addition the total credit value of all modules marked below 40 must not exceed 30 credits and for all modules marked below 50 must not exceed 55 credits.
In the case of the Diploma, students who gain an average mark of 70 or more and have no mark below 40 will be eligible for the award of Distinction. Those gaining an average of 60 and have no mark below 40 will be eligible for a Merit. Certificates can only be pass or fail.

Admission requirements
Entrants to this programme are normally required to have obtained an honours degree in a biological subject, agriculture, horticulture, or environmental science, and persons with other qualifications may be approved by senate. Applicants whose academic qualifications do not meet these requirements may in the first instant be admitted to a post-experience course; they may then transfer to MSc status if their performance during the first term is satisfactory.

Admissions Tutor: Dr Andrew Daymond

Support for students and their learning
University support for students and their learning falls into two categories. Learning support is provided by a wide array of services across the University, including: the University Library, the Student Employment, Experience and Careers Centre (SEECC), In-sessional English Support Programme, the Study Advice and Mathematics Support Centre teams, IT Services and the Student Access to Independent Learning (S@il) computer-based teaching and learning facilities. There are language laboratory facilities both for those students studying on a language degree and for those taking modules offered by the Institution-wide Language Programme. Student guidance and welfare support is provided by Personal Tutors, School Senior Tutors, the Students' Union, the Medical Practice and advisers in the Student Services Centre. The Student Services Centre is housed in the Carrington Building and offers advice on accommodation, careers, disability, finance, and wellbeing. Students can get key information and guidance from the team of Helpdesk Advisers, or make an appointment with a specialist adviser; Student Services also offer drop-in sessions and runs workshops and seminars on a range of topics. For more information see www.reading.ac.uk/student

Career prospects

Graduates from the course are likely to find opportunities with industrial enterprises and institutions in the areas of commercial horticultural crop production and amenity horticulture. Other opportunities exist at universities seeking graduates with pre-training for research to PhD level, and governmental, media and other organisations involved with horticulture.

Opportunities for study abroad or for placements
Students will be able to undertake the 60 credit project module at an approved institution or an appropriate industrial concern, but this will depend on having the necessary linguistic skills and finding a suitable placement, and appropriate supervisory arrangements being in place.

Programme Outcomes
1. the concepts and techniques of horticulture and their application to commercial and amenity horticulture;
2. the scientific knowledge underpinning the development of current horticultural knowledge;
3. current advances in commercial, amenity and social aspects of horticulture.
Teaching/learning methods and strategies

The knowledge required is provided in formal lectures supported by practical work, seminars and presentations.

Feedback on student work is provided by the discussion and return of work in tutorials and seminars. All practical work is marked and returned to the student.

Knowledge and Understanding

A. Knowledge and understanding of:	**Teaching/learning methods and strategies**
1. the concepts and techniques of horticulture and their application to commercial horticulture; 2. the scientific knowledge underpinning the development of current horticultural knowledge; 3. current advances in commercial, amenity and social aspects of horticulture.	The knowledge required is provided in formal lectures supported by practical work, seminars and presentations. Feedback on student work is provided by the discussion and return of work in tutorials and seminars. All practical work is marked and returned to the student. *Assessment* Knowledge is tested through a combination of coursework, including oral presentations, and formal examinations, plus a written report of a practical-based project.

Skills and other attributes

B. Intellectual skills - *able to:*	**Teaching/learning methods and strategies**
1. think logically and evaluate critically research and advance scholarship in the discipline; 2. plan and implement tasks at a professional level to solve problems related to the discipline; 3. evaluate methodologies and where appropriate propose new hypotheses; 4. plan, conduct and write a report on an independent practical project.	Logical application of science and the critical appraisal of methodology are essential parts of the role of a horticulturist in the horticulture industry. These skills will underpin the lectures, practical and project work. *Assessment* 1 - 3 are assessed directly and indirectly in most parts of the course. 1 - 4 are assessed in the final research project report.

C. Practical skills - *able to:*	**Teaching/learning methods and strategies**
1. apply, or adapt, practical instructions safely and accurately; 2. carry out a variety of experimental procedures in the laboratory or greenhouse;	A range of detailed or outline practical instructions are used to allow students to develop a range of practical skills. Staff and postgraduate demonstrators are present

3. interpret quantitatively the results of experiments undertaken by themselves or others;
4. devise experimental methods appropriate for tackling a particular problem.

during practical sessions to guide and help, to mark their reports and give feedback on their work. Students will work on their project under the guidance of one or more members of staff.

Assessment
1 - 4 are assessed to different extents by the practical work associated with the various modules undertaken.

D. Transferable skills - *able to:*

1. make use of IT (word processing, spreadsheets, web sources);
2. communicate scientific ideas;
3. quantitatively analyse data;
4. give oral presentations;
5. work as part of a team;
6. use library resources;
7. manage time.

Teaching/learning methods and strategies

The use of IT is made throughout the programme.
Team work is essential in the practical and seminar sessions associated with modules.
Library resources are addressed in all the modules and during the project and work.
Time management is essential for the timely and effective completion of the programme.

Assessment
1 - 6 contribute to assessed coursework during the first two terms.

Please note - This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of each module can be found in the module description and in the programme handbook. The University reserves the right to modify this specification in unforeseen circumstances, or where the process of academic development and feedback from students, quality assurance process or external sources, such as professional bodies, requires a change to be made. In such circumstances, a revised specification will be issued.