1	**Awarding Institution**	University of Newcastle upon Tyne

2	**Teaching Institution**	University of Newcastle upon Tyne

3	**Final Award**	BSc (Hons)

4	**Programme title**	Marine Biology

5	**Programme Accredited by**:	

6	**UCAS Code**	C161

7	**QAA Subject Benchmarking Group(s)**	Environmental Sciences & Organismal Biology

8	**Date of production/revision**	June 2004

9 Programme Aims:

1. To enable everyone on the degree programme to develop a thorough knowledge and understanding of Marine Biology across the discipline and in the specialist areas of; (i) the biology of marine organisms; (ii) the ecology of marine communities and (iii) the physical and chemical processes occurring in the marine environment, together with appropriate practical and key skills.

2. To be able to appreciate the application of this knowledge and understanding to the management of human activities.

3. To provide a Marine Biology programme for well motivated people from a diversity of social, geographic and academic backgrounds.

4. To provide a Marine Biology curriculum enhanced by an active research environment that will encourage: thinking in a critical and constructive manner, awareness of new technologies and the skills and aptitudes needed for the development of a wide variety of careers within Marine Biology and other areas of graduate employment.

5. To stimulate an informed interest in Marine Biology and engender an awareness of the discipline's interaction with society and the environment.

6. To provide an environment within which everyone can enjoy their learning experience and develop the skills and attitudes to underpin lifelong learnings.

10(a) Programme Intended Learning Outcomes:

A Knowledge and understanding

1 have a coherent understanding of Marine Biology, including a knowledge and understanding of; (i) the biology of marine organisms; (ii) the ecology of marine communities; and (iii) the physical and chemical processes occurring in the marine environment.

2 have a coherent understanding of the role of marine biological science in the management of human activities on the marine environment.

3 understand current developments in Marine Biology and appreciate the possible implications

B Subject-specific/professional skills

1 have developed the practical and field skills which are an essential attribute of a marine biologist

C Cognitive skills

1 can demonstrate academic rigour and the ability to propose, test and challenge hypotheses

D Key (transferable) skills

1 an awareness of their responsibility to society and the environment, including their potential influence in society

2 motivation and ability to build on the learning experiences of the degree programme and the range of learning experiences and initial qualifications they had on entry

3 capability to obtain and develop careers in a wide range of work environments

4 an ability to communicate effectively in a variety of media and handle information, including IT and statistical methods

5 capable of independent and team working including time and resource management

10(b)	**Programme Intended Learning Outcomes:**	**Teaching and Learning Methods and Strategies**
A	**Knowledge and understanding**	
1	have a coherent understanding of Marine Biology, including a knowledge and understanding of; (i) the biology of marine organisms; (ii) the ecology of marine communities; and (iii) the physical and chemical processes occurring in the marine environment.	Knowledge and understanding (A1 – A3) are principally imparted through lectures and seminars. Seminars and advanced lecture courses in Stage 3 are particularly important in delivering A3 as they provide the opportunity for exposure to knowledge at the 'cutting edge' of advancement in the field. Throughout the course students are directed to appropriate reading materials. The tutorial system and study skills classes provide support and guidance in the use of literature and the diversity of sources available. A number of 'self-study' packs, backed by tutorial support and seminars, are used to develop IT and statistical expertise.
2	have a coherent understanding of the role of marine biological science in the management of human activities on the marine environment.	
3	understand current developments in Marine Biology and appreciate the possible implications	
B	**Subject-specific/professional skills**	
1	have developed the practical and field skills which are an essential attribute of a marine biologist	Practical, field and research skills are developed in laboratory and field classes. Students are encouraged to develop and hone their practical skills through tutorial support and supervisor contacts in practical classes and project work. Independent and group project based exercises further reinforce these lessons and allow self-evaluation and critique.
C	**Cognitive skills**	
1.	can demonstrate academic rigour and the ability to propose, test and challenge hypotheses	Extensive use of structured independent practical/field exercises begins the students' training in research methodologies which culminates in the honours research project. Tutorials, seminars and workshops that cover research methodologies and the 'scientific method' accompany these.

D	**Key (transferable) skills**	
1	are aware of their responsibility to society and the environment, including their potential influence in society	Awareness of the role of marine science in society is developed through exposure to practitioners and case studies in seminars and from visiting lecturers. These are an integral part of many advanced (Stage 3) modules. Students take part in a variety of problem solving activities, including design of projects, role play exercises and planning overseas travel. These are undertaken as both group (team) and independent activities. Exposure to the diversity of material in the programme and the range of external experiences reinforces the motivation of the students and prepares them for a wide variety of possible roles on graduation. This is supported by targeted presentations from the University Careers Service.
2	are motivated people, able to build on the learning experiences of the degree programme and the range of learning experiences and initial qualifications they had on entry	
3	are capable of obtaining and developing careers in a wide range of work environments	

10(c)	**Programme Intended Learning Outcomes:**	**Assessment Strategy and Methods**
A	**Knowledge and understanding**	
1	have a coherent understanding of Marine Biology, including a knowledge and understanding of; (I) the biology of marine organisms; (ii) the ecology of marine communities; and (iii) the physical and chemical processes occurring in the marine environment.	Knowledge and understanding of the subject are primarily assessed through unseen written examinations. These include, in Stage 1, MCQ tests to examine the breadth of factual knowledge. Assessed essays/library projects are used to determine the ability to apply knowledge and integrate material. Formative feedback is provided throughout the course to allow students to assess and develop their learning skills.
2	have a coherent understanding of the role of marine biological science in the management of human activities on the marine environment.	
3	understand current developments in Marine Biology and appreciate the possible implications	

B Subject-specific/professional skills 1 have developed the practical and field which are an essential attribute of a marine biologist	Practical and field skills are primarily evaluated by assessed written reports and research project reports.
C Cognitive skills 1 can demonstrate academic rigour and the ability to propose, test and challenge hypotheses	The various research exercises and in particular the field course and honours research projects are the primary assessments for the evaluation of research designs, and the ability to apply academic rigour to the evaluation of results.

D Key (transferable) skills 1 are aware of their responsibility to society and the environment, including their potential influence in society 2 are motivated people, able to build on the learning experiences of the degree programme and the range of learning experiences and initial qualifications they had on entry 3 are capable of obtaining and developing careers in a wide range of work environments	D1 is assessed by unseen written examination in that the MSM395 General Paper in Marine Biology includes broad ranging questions that cover the societal role and application of marine science. The other skills are not assessed.

11 Programme Curriculum, Structure, and Features:

(a) Duration three years.
(b) Comprises three stages.
(c) A total of 360 credits, 120 Stage 1, 120 Stage 2, 120 Stage 3
(d) Module credit values vary between 10 and 25. 10 credits represents 100 hours of student activity and 25 credits 250 hours of student activity.
(e) Progression: Pass in 120 credits, including all core modules is required in Stages 1 and 2. Non-core modules which are failed with a mark of >35 can be compensated if the overall mark is >40. The Board of Examiners may recommend a pass at a lower mark if circumstances warrant. Students who do not satisfy the requirements to progress within the Honours degree programme but who do satisfy the requirements for progression within the parallel Ordinary degree programme at the end of Stage 1

or Stage 2, or, on tutorial advice, during Stage 2. Such transfer will be subject to the approval of Faculty Progress and Concessions Committee.

(f) Innovative features of the degree include the amount and integration of field studies into the programme, the marine biology overseas exercise and the use of external practitioners and case studies to inform Stage 3 teaching. Students undertake 4 weeks of field courses and 6 other modules include field practical classes.

(ii) **Stage One**

Stage One provides an introduction to core subjects in Marine Biology supported by a balanced programme of modules designed to provide the sound scientific background required for the later stages of the degree programme.

Four modules focus specifically on aspects of the biology and functioning of marine ecosystems. These are: ***Marine Systems*** **(MST 102),** ***Biodiversity of Marine Animals*** **(MST 100),** and ***Field and Laboratory Techniques in Marine Science*** **(MST 103)**. The last of these covers the wide variety of ways scientists measure and record the marine environment and how that information is used. All candidates for the Honours degree in Marine Biology must demonstrate a high level of proficiency and knowledge of these subjects. These modules are supported by the other modules, all of which are compulsory: ***Introduction to Marine Environmental Engineering*** **(MST104),** ***Cell and Animal Biology*** **(BIO107) and** ***Statistical Methods*** **(MAS182).** Between them these provide addition knowledge and skills that will be essential in the subsequent development of well equipped graduate marine biologists.

The modules at stage one introduce the student to key areas of the syllabus and provide an introduction to practical study through the use of field and laboratory classes. Independent field study with appropriate study guides, video and other methods of learning will also be used to provide the candidate with a rich and diverse background to their learning of marine biology and to ensure that the student has the developed the skills needed. The courses provide both an overview and an introduction to the subject and the modules are suitable for those proceeding to other scientific disciplines.

At Stage One students will begin to learn how to supplement the formal taught components of the course with private study and Marine Biology candidates will be assigned personal tutors. They will guide them in the process, as well as providing a small group study environment where the student will be encouraged to practice both study and communication skills prior to proceeding to those modules at Stages 2 and 3 where these skills will be formally assessed.

On completing the Stage One programme the student:

- *will be eager to learn more about marine biology,*
- *should have a sound knowledge of marine biology at an introductory level,*

- *understand the basis for the study of marine biology through both biological and physical sciences.*

Stage Two

On completion of Stage One every student, whatever their cultural or academic background, will have achieved an enhanced basis for more advanced study of the subject at Stage Two of the Honours Marine Biology programme which builds on the platform created by the first year of study. A number of core subjects are studied at greater depth and new subjects in Marine Biology are introduced. The modules include both pure and applied aspects of Marine Biology as well as a continuation of basic scientific and information skill related modules.

Special features of the course are Modules providing more detailed coverage of experimental biology, marine ecology, oceanography, experimental marine biology and ecophysiology that lead into the advanced modules to be studied in Stage Three of the degree programme.

Considerable emphasis is given to the learning of field and laboratory practical techniques. The course therefore includes field study modules, covering the application of data analysis, statistics and other numerical methods.

There are modules encouraging learning of the theoretical basis of marine biology for which the student will have to study a variety of sources of information. The candidate will also study modules which will enhance related practical skills. These modular elements are designed to develop the student's skills in information technology, data and information source handling, writing and oral presentation. All of which it is hoped that the candidates will enjoy using in the Stage 3 programme and will enable them to proceed to a wide variety of career tracks.

Stage 3 will begin with the Module ***MST3xx Key Skills in Marine Biology*** important components of which will be completed during the second summer vacation. The student should find out about this in good time and plan for during Stage 2.

At the end of the Second Stage of the degree programme the student:

- *will have gained a sound knowledge of the biology of marine organisms, the physical and chemical processes in the marine environment,*
- *should have knowledge of experimental study of the physiology, development and regulatory processes of marine organisms,*
- *be able to locate and review literature using both library based and electronic information retrieval systems.*
- *will have developed a variety of practical and field skills appropriate for a marine biologist,*
- *be in a position to plan and carry out an independent scientific investigation using either field or laboratory techniques,*
- *should be capable of independent study including the ability to present a review of their own work or that of others in relation to published sources of literature.*

Building on these skills will be a major part of the programme of study at Stage 3.

Stage Three

Stage Three of the degree programme has been designed to provide both broad coverage of the subject and to provide opportunities for specialisation and study in depth. The whole programme builds on the diverse learning outcomes achieved in the previous two Stages of the degree programme.

Prior to the first Semester the student will undertake a variety of studies in the Module ***MST3 – Key Skills in Marine Biology*** which explicitly develops a number of those skills further. The candidate will for instance, undertake a period of endeavour away from the University as an investigative scientific journalist and will be encouraged to show initiative in seeking a suitable location for this, possibly overseas. Students will be given training in sea survival techniques and safety issues and will undertake an independent scientific investigation on a field course that has traditionally been held at the Isle of Cumbrae to provide them with experience of more diverse marine environments. This module continues through the year with tutorials, intensive workshop teaching on Evironmental Impact Assessment and Modelling and the seminar series. The 'General Paper' examines the breadth and depth of student knowledge and their ability to communicate effectively and in a technically correct manner on topical issues. The seminars and tutorials in particular prepare for this.

In the first semester 10 credit advanced modules are introduced which present a subject in the context of the current research literature. The student will select to study two of these. Such courses are inevitably specialised and deliberately reflect the research expertise of the School.

In the second semester students will select for special study a larger 20 credit integrated Advanced Module. These are designed to bring them an understanding of the thresholds of current research in Marine Sciences and how that knowledge is of benefit to Society. These will present conceptual ideas and provide the basis for in depth private study and will often involve interaction with professional marine biologists invited to participate in the programme.

This broad range of advanced course modules forms the background to the student's own independent studies.

A major component of the course that integrates much of the proceeding training is the **RESEARCH PROJECT**. This takes the form of an independent scientific investigation carried out the supervision of a member of the School and presented as a literature review, written dissertation and as the subject of an oral presentation which students give to class and members of the School at a mini scientific conference (40 credits in total). The oral component will be assessed but the student will have already gained experience at earlier stages of the degree programme and can expect to have achieved a high level of technical and professional competence by this stage of the degree programme.

12 Criteria for Admission:

GCSE Mathematics (minimum grade C) required.

A-Level Subjects and Grades
BBC/BCC from 18 units in 6- or 12-unit qualifications and normally including A level Biology. Chemistry preferred at AS level if not offered at A level but not essential

Alternative entry qualifications
World-wide qualifications equivalent to 'A' levels accepted

Scottish qualifications
AABBB at Higher Grade, including Biology at Grade 'A', Chemistry also preferred.
Combinations of Highers and Advanced Highers accepted.

Other Qualifications

For candidates offering Access courses, modules in Biological Science and Chemistry essential (at a high level for courses which are graded).

Admissions policy
To admit candidates from a wide range of backgrounds and ages, from any country in the world, who are well qualified for the degree course.

Arrangements for non-standard entrants
All non-standard applicants are invited for an informal discussion with the Admissions Tutor and Degree Director to ensure that they have the background which will adequately prepare them for the degree course.

PARTNERS scheme
The Marine Biology programme is involved in the Newcastle PARTNERS programme.
The PARTNERS Programme is intended to support students who definitely wish to study at Newcastle University.
The PARTNERS offer requires students to

- successfully complete the Assessed Summer School
- achieve specific grades in their A/As levels/AVCE/National Diploma course

These grades will be slightly lower than the normal offer for the Marine Biology degree programme to take account of the extra work they do for the Assessed Summer School. The PARTNERS offer for this degree is CDD.

Any Additional Requirements
None

13 Support for Students and their Learning:

- Induction prior to each stage

Induction week activities include instruction in time management and in study skills and will begin the process of cognitive skill development that will continue through regular contacts with the student's tutor to enhance the learning gained through the specific modules of the degree programme.

- Study skills support

Small group study sessions provide an environment to practice both study and communication skills in all three Stages of the Marine Biology Degree Programme.

- Academic support

The selection of modules is made in consultation with the tutor who will advise the student, bearing in mind the student's previous learning and background. Progress in all three Stages of the Marine Biology Degree Programme can be discussed with personal tutors (see Pastoral care).

- Pastoral support

Students are assigned a personal tutor who will advise them in all three Stages. Every student is required to see their tutor at the commencement of each semester, and at the end of the academic year. Personal tutors may be seen by arrangement at any time specially whenever the student is experiencing personal problems – academic, domestic or private affairs such as their health or that of the family or living arrangements that might affect the student's progress. At Stages 1, 2 and 3 the academic tutor will be directly involved in small group teaching through supervision groups.
The University provides many other facilities such as the Counselling Service, the Students Union Welfare Centre as well as the Chaplaincy, and Childcare Support to provide students with support for their learning.

- Support for Special Needs

The Disability Support Service co-ordinates services for students with disabilities in terms of admissions to courses and giving on-going support to enable students to study effectively and make full use of opportunities at University. This support will be specific and relevant to the course of study chosen.

The Service offers advice and guidance for current and prospective students and liaises with University schools and outside agencies where appropriate.

Special support provision can include:
Availability of regular contact with each student in a quiet and confidential environment. Difficulties can be discussed and support assessed as necessary.

Arranging specialist support and equipment
Organising special assessment arrangements
Giving advice on adapted accommodation
Help to access Disabled Students Allowance
Liaison with other services who can provide more specialist help and advice if necessary, for example - Disability North or RNIB
The facility to recommend special examination arrangements when needed in conjunction with the Examinations office
The facility to liaise with schools to allow a student to fulfil course requirements. This could include extending deadlines on pieces of work or changing how a student is able to complete practical work, placements or field-work. An educational role in relation to other members of the University staff. This may include staff awareness training or the provision of advice and appropriate literature
Liaison with Estates to ensure that the physical environment is made as accessible as far as possible
Registers of support workers available for help in finding appropriate support in lectures, seminars tutorials laboratory and field work etc. This can include the use of note-taking support, readers, communication support technical support or whatever is appropriate.

Learning resources

Resources available for students include: the Dove Marine Laboratory, the Research Vessel *Bernicia*, Robinson Library, Medical School Library, Computing facilities. Students are urged to check their emails regularly as well as checking the University web pages for notes and reading lists.

14 Methods for evaluating and improving the quality and standards of teaching and learning:

- Module reviews

Modules are formally reviewed bioannually. These are carried out by the Marine Biology Standing Committee of the Board of Studies and are informed by student feed-back questionnaires.

- Programme reviews

A meeting of the Marine Biology student body may be called towards the beginning of each Semester, when matters of student interest have arisen. Such meetings will enable staff and student members of the Board of Studies to report on topics drawn to the attention of the Staff-Student Liaison Committee. They will also provide a forum for other members of the Committee to express their

views.

- External examiner reports

These are reviewed by the Marine Biology Standing Committee of the Board of Studies and action taken as appropriate. The response to the points raised in reported in the Autumn meeting of the Board of Studies.

- Accreditation reports

Not Applicable

- Student evaluations

Student evaluation takes place on a 2 year cycle. In odd years (e.g. 1001-02) students complete questionnaires which seek to evaluate each module. In even years 2002-3) questionnaires focus on the teaching of individual staff modules. In all years Stage and Degree Programme evaluation questionnaire are used.

- Feedback Mechanisms

Feedback is sought by student questionnaires distributed by teaching staff. When ever possible these will be computer read forms and will cover either the module and its relationship to the degree as a whole or, on occasion, to the teaching of individual module components. Questionnaires may also refer to each stage of the degree, and for final year students, the degree programme as a whole. Information derived from the module questionnaires will be passed to the Staff-Student Liaison Committee for comment, and to ensure an effective dialogue in the provision of the degree programme

- Faculty and University Review Mechanisms

Introduction

The University is responsible for the quality of the education provided to students on its degree programmes. The aims of the Taught Programme Review (TPR) is to enable the University to discharge effectively that responsibility. The objectives of TPR are: to provide for the systematic review of the quality of taught programmes; to assure the quality of taught programmes; to enhance the quality of taught programmes. The purpose of the present paper is to set out guidelines for TPR. These cover: (1) the principles; (2) the methodology; (3) procedures; (4) outcomes.

Section 1 - Principles

TPR is based upon the principles of: Self-Review The basis for TPR is self-review by those responsible for teaching and learning on the programme and by representatives of students registered for the programme. Benchmarking Self-review takes the form of an evaluation of provision against institution-wide benchmarks, although it is recognised that individual benchmarks may not be appropriate to all types of provision. Peer Review and Feedback Self-reviews are evaluated by peers and lead to feedback. Reporting Self-reviews lead to reports which form the basis for assuring and enhancing the quality of provision at higher

levels of the University. Dissemination and Monitoring There should be provision to disseminate good practice identified in the course of TPR and to monitor the improvement of practice.

Section 2 - Methods

Reflecting the above, the methodology for TPR is that: self-review is undertaken by boards of studies which includes all staff involved in teaching, learning and assessment on the programme and additionally has student members; self-review by the boards of studies is based upon an evaluation of provision against the benchmarks of the University's Statements of Good Practice in Taught Programmes; the self-review is embodied in a Degree Programme Quality Report; Degree Programme Quality Reports are sent to heads of schools for onward transmission to faculty teaching committees (FTCs); FTCs act as peer reviewers. They analyse reports and give feedback to boards of studies on the FTC Feedback Form. FTCs then produce Faculty Quality Reports which go to the University Teaching Committee (UTC); UTC analyses Faculty Quality Reports and produces a University Quality Report which goes to FTCs; FTCs discuss University Quality Reports with a view to disseminating exemplary practice from other faculties to boards of studies. The latter consider Faculty Quality Reports with a view to identifying exemplary practice within the faculty. An overall summative judgement of "quality approved" or "subject to re-assessment within one year" replaced the former.

15 Regulation of Assessment

Pass Marks

A common marking standard is used for all assessment purposes. Marks are available on a scale 0-100, and the following standard divisions are applied:

> 70	1st (First Class)
60-69	2:1 (upper second class)
50-59	2:2 (lower second class)
40-49	3rd (3rd)
< 40	Fail at Honour

Course Requirements

Students must satisfy the examiners in the assessment specified for each core module at Stage 1 to proceed to Stage 2 and all examinations at Stage 2 in order to proceed to Stage 3.

Weighting of Stages

The final degree mark will be based on both the student's Stage 2 mark (25%) and the Stage 3 mark (75%). At Stage 3 there will be a general examination paper worth 10 credits and the final marks will take this into account. The general paper is designed to counteract the tendency for modular degree programmes to be thought of as the sum of separate parts. We do not take that view and the general paper will have questions that require the synthesis of learning developed in many modules or from the seminar series and that will provide the student with the opportunities to draw on personal reading and study.

Common Marking Scheme

The following mark classification will be used for the assessment of most examinations and essays. However, there will be occasions when the assessment requirements of the module (or piece of assessed work) require an alternative classification. In these circumstances, other clear criteria will be used, in conjunction with the aims and objectives of the module (or piece of assessed work).

Literal Mark	Mark Range	Descriptive Equivalent
First Class	90-100	Excellent. An outstanding answer in the context of module/topic aims and objectives with respect to: synthesis of material, innovative use of material, originality and critical ability. Demonstrates thorough understanding of topic with wide evidence of additional study and outstanding communication and presentation skills.
	80-89	Excellent. Outstanding but minor deficiencies in some elements compensated by excellence in others. Outstanding communication and presentation skills
	70-79	Excellent. Some evidence of outstanding work with respect to synthesis, originality, additional study and style. Outstanding communication and presentation skills
Second Class	65-69	Very good. A full answer to question with thorough understanding of topic, substantial detail supported by reasoned argument, with evidence of further study. Very good communication and presentation skills.
Upper Second	60-64	Very good. An answer which provides substantial information that addresses the question. Less thorough than the upper range of class. Some evidence of additional study. Good communication and presentational skills
	55-59	Good. Answer that indicates general understanding of question, largely factually correct, but exclusively based on course material. Lacking in critical use of material and in evidence of further study, presented in an adequate framework. Satisfactory presentation skills.
Lower Second	50-54	Good. A relevant answer but relies on course material. More omissions of material compared to the upper range of class. More limited presentation skills.
Third Class	45-49	Basic. Some understanding of basic material. Omission of much relevant material. Use of irrelevant material. Poor communication and presentation.
	40-44	Basic. Minimum understanding of basic material. More errors and omissions of basic material compared to upper range. Poor communication and presentation.
Fail Compensation Range	35-39	Borderline fail. Fails to satisfy the minimum standards set by module/topic aims and objectives. Many factual errors and omissions. Very poor communication and presentation skills.
Fail	30-34	Fail. Irrelevant approach to topic. Failure to understand basic requirements of question. High level of omission and irrelevant material. Some material of relevance. Deficient in communication skills. Marks warded in increments or subdivisions of 5 for relevant points.
	15-29	Fail. Significant inability to deal with the requirements of the question. Some factual relevant material. Marks awarded in increments or subdivisions of 5 for each relevant point.
	1-15	Fail. Very short answer with little factual relevant material. Marks awarded in increments or subdivisions of 5 for each relevant point.
	0	No attempt to answer question

Role of the External Examiner

The external examiner fulfils 4 basic roles

(1) ensures the degree standards are comparable with other similar programmes offered by other institutions in the UK.

(2) review the curriculum and assessment procedures including review of all Honours (Stage 2 and 3) examination questions.

(3) ensures that all examination and assessment procedures have been properly and fairly applied.

(4) acts as a final advisor to the Board of Examiners in the award of degree classes.

16 Indiactors of Quality and Standards:

Professional Accreditation Reports
Not applicable

Internal Review Reports
The degree programme is subject of a formal review every 2 years. These reviews are considered by the Marine Biology Standing Committee of the Board of Studies with the results reported via the Head of School to Faculty Teaching Committee and the University Faculty Committee

Previous QAA Reports
The teaching within Organismal Biological Sciences, which includes this degree, was assessed as excellent (22/24) in the last HEFCE review.
HEFCE categories of "Excellent", "Satisfactory" or "Unsatisfactory" from

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.

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

The University Prospectus

The School Prospectus

The University and Degree Programme Regulations

The Degree Programme Handbook

QAA Subject Review Report

Appendix:

10 b ii

	How taught?	How enabled to learn?
A1	Lectures, seminars	Independent reading
A2	Lectures, seminars	Independent reading
A3	Lectures, seminars	Independent reading
B1	Practicals, field work, research projects	Undertaking experiments and field work, design and undertake research studies
C1	research projects	design and undertake research studies
D1	Seminars, lectures	Independent reading, case studies
D2	Example classes	Problem solving exercises, group activities
D3	Seminars	Independent reading

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	If assessed?	How assessed?
A1	Yes	Unseen written examinations
A2	Yes	Unseen written examinations
A3	Yes	Unseen written examinations
B1	Yes	Practical and project write-ups
C1	Yes	Research and field project write-ups
D1	Yes	Unseen written examinations (MSM395 General paper)
D2	No	
D3	No	

11 ii

Module	Credit	Status	Intended Learning Outcomes							
			A1	A2	A3	B1	C1	D1	D2	D3
Stage 1										
BIO107	20	Cp	□			□				
MST100	10	Cp	□			□			□	
MST101	10	Cr	□	□		□		□	□	
MST102	20	Cr	□			□			□	
MST103	20	Cr	□						□	
MST104	10	Cp				□			□	
MAS182	10	Cp	□					□		
MST105	10	Cp	□							
Stage 2										
MST200	10	Cp	□							
MST201	10	Cp	□							
MST202	10	Cp	□							
MST203	10	Cp				□	□			
NEU203	20	Cp	□			□				
BNS231	10	Op	□							
MST204	10	Op	□							
MST205	10	Cp	□			□	□			

Stage 3										