|  |  |
| --- | --- |
| Programme Specification |  |

**MRes in Advanced Biological Sciences**

**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 s/he takes full advantage of the learning opportunities that are provided.

|  |  |
| --- | --- |
| Awarding Institution | University of Southampton (UoS) |
| Teaching Institution | University of Southampton |
| Accreditation details | NA |
| Final award | Master of Research (MRes) |
| Name of award | Advanced Biological Sciences |
| Interim Exit awards | Postgraduate Diploma  Postgraduate Certificate |
| FHEQ level of final award | Level 7 |
|  |  |
| QAA Subject Benchmark or other external reference | Bioscience QAA: Master’s degree characteristics (2010)  QAA Framework for Higher Education Qualifications (FHEQ) of UK Degree Awarding Bodies |
| Programme Coordinator | Dr Lorraine E. Williams |
| Date specification was written | 01/08/2014 |

Programme Overview

**Brief outline of the programme**

Southampton Biological Sciences has a leading international reputation for its research across a broad range of biological disciplines. The MRes in Advanced Biological Sciences is designed for graduates of biological sciences and other relevant disciplines and it offers you the opportunity to build on the background of your undergraduate degree while specialising further in an area that will enhance your future career path. The 12 month programme offers a high quality postgraduate education in research in one of these specialised subject areas:

* Biodiversity, Ecology and Ecosystem services
* Biotechnology
* Developmental Biology
* Microbiology
* Neuroscience
* Molecular and Cellular Biosciences
* Plant Biology
* Zoology

The programme comprises two main components: a taught component and an intensive research experience. The larger research component consists of a novel, independent (supported) research project which will be carried out in the state-of-the-art research facilities of Biological Sciences. The smaller taught component is composed of four courses that will broaden your skills in appropriate areas related to the research project. The exact portfolio of courses is selected with the advice of the academic supervisor of the research project. This programme will provide you with an education and training suitable for a wide variety of careers and also will prepare you for higher degrees.

**Learning and teaching**

To develop your knowledge and understanding of Biological Sciences a wide range of teaching methods will be used. You will be taught through a combination of lectures, tutorials and coursework to help develop your core knowledge and understanding. You will undertake an extended research project in one of the specialisation areas and will be supervised throughout by a tutor with leading research experience in that area. Four taught modules will be chosen with the help of your supervisor to provide a solid foundation of knowledge. Throughout the programme you will undertake independent reading both to supplement and consolidate taught material and to broaden your knowledge and understanding.

**Assessment**

The taught component will be assessed by a combination of coursework (e.g. essays, poster presentations, oral presentations) and examinations at the end of each semester. Some modules are not exam based. The research component will be assessed on the practical outcomes of the project work and the ability to communicate these and background understanding in a scientific dissertation and oral presentation. This will be assessed independently by an internal Southampton academic in addition to the supervisor.

Educational Aims of the Programme

The MRes in Advanced Biological Sciences is designed for graduates of biological sciences or closely related disciplines. The programme is research focussed but there will also be courses taught by academic staff at the Centre for Biological Sciences. By the end of your MRes programme you will have extended your subject-specific and employability skills beyond the level of your undergraduate degree. A Master of Research programme differs from a conventional MSc programme in the balance between teaching and research. As an MRes student you will spend more time on the research project and correspondingly less time will be devoted to formal teaching.

The aims of the programme are to:

* Provide the means to carry out an extensive laboratory-based project on a specific topic related to the specialist area;
* Provide advanced knowledge in a particular area within the field of biological sciences research;
* Provide an opportunity to work in a research environment in state-of- the art laboratories;
* Provide training in biological laboratory skills;
* Provide a stimulating, informed environment through a range of courses;
* Provide an opportunity to develop a range of transferable skills (written and oral communication, time management, project management, team working, information and communication technology, data collection and analysis);
* Provide awareness of good laboratory practice and safety issues in a modern research laboratory.
* Provide a sound and suitable qualification that would enable you to proceed to a more specialist higher degree at the PhD level or a career in biological sciences

Programme Learning Outcomes

Knowledge and Understanding

Having successfully completed this programme you will be able to demonstrate:

1. Knowledge and understanding of the scientific and technological principles underlying the chosen research specialisation;
2. An understanding of how to design and test scientific hypotheses;
3. An ability to address and develop strategies to resolve a research problem in the chosen specialist area;
4. Skills in critical evaluation of primary and review scientific literature and the ability to develop this knowledge and understanding in relation to the chosen area of research;
5. Experience in presenting scientific information;
6. An ability to collect, record and critically evaluate laboratory data;
7. Knowledge of general IT methodology relating to the area to find relevant information.

**Teaching and Learning Methods**

Learning and teaching methods will include:

* Independent (supported) project work on a research problem that could lead to results publishable in the peer reviewed literature;
* Regular meetings about research work with the supervisory team, with the lead academic as the key provider of guidance;
* Staff-led lectures, tutorials, seminars and demonstrations;
* Directed reading of the primary scientific literature;
* Student-led seminars and presentations (verbal and poster) and contributions to regular research group meetings;
* Carrying out written assignments and other activities associated with the coursework component of the modular component of study.

For the research-based component you will carry out an extensive laboratory-based project on a topic related to the specialised area. You will plan the project with the support of your academic research supervisor. Initially you will carry out a preliminary review of the literature in the area of research to help you plan the overall objectives and build on the current level of knowledge in the area of research. This will give you the opportunity of producing results that would be of a standard to publish in peer reviewed journals. You will present an overview containing these elements at an early stage to your project supervisor and then have regular contact throughout the remainder of the project. This will include providing a regular summary of research finding to the supervisor. A detailed plan of the final dissertation will be presented to the supervisor three quarters of the way through the project and feedback provided by the supervisor in how to structure the final dissertation.

**Assessment methods**

Taught component

The taught component will be assessed by a mixture of coursework (eg. essays, poster presentations, oral presentations) and examination. Some modules are not exam based. All biological sciences and skills centred learning is taken at FHEQ Level 7 (which maps to BIOL6XXX modules). The exams and coursework are designed to ensure that the learning outcomes have been achieved. The proportion of coursework and exam is that which is judged to most suit student engagement with the content of the course as well as judging the level of understanding.

Past examination papers are available through the library website [www.soton.ac.uk/library/resources/index.html](http://www.soton.ac.uk/library/resources/index.html) under ‘exam papers online’ and also on the Staff Student Liaison Blackboard site under the appropriate heading.

Research component

The research component will be assessed on the basis of the practical outcomes of the project work, ability to communicate these and also the understanding of background literature, all of which is judged through the production of a scientific dissertation. This will be assessed independently by an internal academic examiner within the University of Southampton in addition to the supervisor.

Subject Specific Intellectual and Research Skills

Having successfully completed this programme you will be able to:

1. Develop research strategies for solving problems in the chosen research area;
2. Formulate and test hypotheses by planning, conducting and reporting a significant programme of biological sciences research;
3. Find, read, understand and explain scientific publications related to the chosen area of research;
4. Use computer software to record and analyse data and determine their importance and validity;
5. Undertake scientific investigations in a responsible and safe manner, paying due attention to risk assessment and relevant health and safety regulations;
6. Have the potential to play a strong part as a researcher in a team in biological sciences-based industry;
7. Be able to progress to a higher degree in the relevant area.

*Teaching and Learning Methods*

Learning and teaching methods will include:

* Staff-led lectures, tutorials, seminars and demonstrations;
* Directed reading of the primary scientific literature;
* Student-led seminars and presentations (verbal and poster) and attendance at regular research group meetings;
* Independent (supported) project work in the research environment on a research problem that could realistically lead to results publishable in the peer reviewed literature;
* Regular meetings about research work with the supervisory team, with the lead academic as the key provider of guidance;
* Engagement with written assignments and other activities associated with the coursework component of the taught modules;
* Regular meetings about research work with the supervisory team, with the lead academic as the key provider of guidance.

*Assessment methods*

The taught component will be assessed by a combination of coursework and examinations at the end of each semester.

The research component will be assessed on the practical outcomes of the project work and the ability to communicate these and background understanding in a scientific dissertation. See above for more detail on these.

Transferable and Generic Skills

The transferable skills you will develop during your degree are those that will improve your employability and will be of use to you in your future career.

1. Numerical competency, proficient in English and good communication skills with some experience in giving scientific presentations;
2. General proficiency with Information Technology; the effective use of websites and databases to locate, extract and synthesise relevant information;
3. The compilation of knowledge and understanding through critical reading of material: learn independently through critical reading;
4. The application of such knowledge and understanding to problems in biological research;
5. Communication of specialist technical information in written form;
6. To work with, and within, a group towards defined outcomes: the ability to balance the need for independent research with the importance of making effective contributions to the work of the scientific team;
7. The ability to develop and apply technical skills in the independent resolution of theoretical problems;
8. Identify and work towards targets for personal, academic and career development;
9. Manage resources and time;
10. Awareness of good laboratory practice and safety issues in a modern research laboratory.

*Teaching and Learning Methods*

You will be helped to acquire these skills through aspects of the formal teaching programme and while carrying out your research project and includes the following

* Staff-led lectures, tutorials, seminars and demonstrations;
* Directed reading of the primary scientific literature, technical reports, websites;
* Student-led seminars and presentations (verbal and poster) and attendance at regular research group meetings;
* Regular meetings with supervisory team and appropriate technical team.

*Assessment methods*

This will be assessed by:

* The production of a dissertation at the end of the study and an oral presentation during the course of the project;
* The completion of coursework tasks as part of the taught module;
* The ability to produce appropriate risk assessments for all aspects of the practical work and completion of the appropriate safety inductions.

Programme Structure

**Typical course content**

The MRes in Biological Science is 12 months in duration. The research component features throughout this period while the taught part of the programme is confined to two teaching semesters (Oct to Jan followed by Feb to June). Each semester includes twelve weeks of study followed by an examinations period (2 weeks). The exam for the end of module assessments will take place during this period. Some modules have other forms of assessment that are not exam based.

The MRes in Biological Science qualification requires an accumulation of 90 ECTS\* (this equates to 180 CATS) this is composed of a research project leading to a dissertation (60ECTS (120 CATS)) and a taught component (30 ECTS (60 CATS).

\* ECTS = European Credit Transfer System

\* CATS = Credit Accumulation Transfer Scheme

The taught module on this programme is worth 7.5 ECTS credits which equates to 150 hours of study. For example a 7.5 ECTS credits module would normally comprise up to 25 hours contact teaching (lectures, tutorials, etc.) with the remainder of the time for your own independent study. Four of these modules will be taken in total.

The taught component involving the modules will be confined to the two semester teaching periods mentioned above. The courses chosen by the student (with guidance from academic supervisor) will be relevant to a masters qualification in Advanced Biological Sciences and of the required academic level but therewill be a strong recommendation to keep an equal balance of courses between Semester 1 and 2 where possible.

The practical phase of the research project will be completed from October until July/August of the following year. During this period there will be preparation of the dissertation with the majority of August and September involving a concentrated period of dissertation preparation.

You will also be encouraged to attend research seminars, which at the Centre for Biological Sciences are run at a variety of different levels. In particular, you will be encouraged to attend key seminars from leading visiting scientists. You will also be able to be part of the Centre for Biological Sciences’ weekly journal clubs, which includes presentations from PhD students and academic staff, and discussions on new or seminal research.

**Programme details**

Details of the modules (i.e. module specifications) can be downloaded from the Centre for Biological Sciences website ([www.southampton.ac.uk/biosci](http://www.southampton.ac.uk/biosci) )

*Taught Component: 30 ECTS Points at FHEQ Level 7*

*Research Component: 60 ECTS Points at FHEQ Level 7*

All students must take four modules chosen with the help of their research supervisor. Students will carry out their research project for the duration of the programme producing a final dissertation towards the end of the period.

We will take a flexible and inclusive approach to enable those students with additional requirements to access the curriculum and achieve the intended learning outcomes of their programme.  We will do this by working with you and the University's [Enabling Services](http://www.southampton.ac.uk/edusupport/) to assess your individual requirements.

**Progression Requirements**

The MRes in Advanced Biological Sciences may be awarded as a Pass, Merit or Distinction level.

The University regulations governing progression, determination and classification of results for standalone masters can be found in the University Calendar (Section IV – General Regulations) <http://www.calendar.soton.ac.uk/sectionIV/progression-regs-standalonemasters.html>

The Academic Regulations for this programme can be found at: <http://www.calendar.soton.ac.uk/sectionIX/sectIX-index.html>

The final award is awarded by Senate on the recommendation of the Faculty Programmes Committee to candidates who have satisfactorily completed an approved course of study and have satisfied the assessment requirements.

All processes and procedures governing teaching and research programmes in the University are described in the Quality Handbook which is available online at:

<https://sharepoint.soton.ac.uk/sites/ese/quality_handbook/Handbook/Index.aspx>

**Intermediate exit points**

You will be eligible for an interim exit award if you complete part of the programme but not all of it, as follows:

|  |  |  |  |
| --- | --- | --- | --- |
| **Qualification** | **Minimum overall credit in ECTS credits** | **Minimum ECTS credits required at level of award** |  |
| Postgraduate Diploma | at least 60 | 45 |  |
| Postgraduate Certificate | at least 30 | 20 |  |

Support for student learning

There are facilities and services to support your learning some of which are accessible to students across the University and some of which will be geared more particularly to students in your particular Faculty or discipline area. The University provides or hosts a wide range of specialist academic and pastoral support services. These include the Library, Computing Services, Careers Destinations, Student Union Advice and Information Service, Student Loans Office, Hardship Fund, Accommodation Office, University Health Service, University Counselling Service, Disability and Learning Support, mature student support, day nursery, language support, and international student support. Electronic details about these services may be found on the University web site at <http://www.southampton.ac.uk/postgraduate/servicesforstudents/index.shtml> the majority of them are co-located in the Student Services Centre on the Highfield Campus. Academic Skills support can be obtained from <http://www.academic-skills.soton.ac.uk> and the student portal at <http://www.sussed.soton.ac.uk> (requiring your personal ID for access).

The University provides:

* A dedicated computer for use during the MRes programme;
* library resources, including e-books, on-line journals and databases, which are comprehensive and up-to-date; together with assistance from Library staff to enable you to make the best use of these resources;
* high speed access to online electronic learning resources on the Internet from dedicated PC Workstations onsite and from your own devices (laptops, smartphones and tablet PCs) via the Eduroam wireless network. There is a wide range of application software available from the Student Public Workstations;
* computer accounts which will connect you to a number of learning technologies for example, the Blackboard virtual learning environment (which facilitates online learning and access to specific learning resources);
* standard ICT tools such as Email, secure filestore and calendars;
* access to key information through the MySouthampton Student Mobile Portal which delivers timetables, Module information, Locations, Tutor details, Library account, bus timetables etc. while you are on the move;
* IT support through a comprehensive website, telephone and online ticketed support and a dedicated helpdesk in the Student Services Centre;
* Enabling Services offering assessment and support (including specialist IT support) facilities if you have a disability, dyslexia, mental health issue or specific learning difficulties;
* the Student Services Centre (SSC) to assist you with a range of general enquiries including financial matters, accommodation, exams, graduation, student visas, ID cards;
* Career Destinations, advising on job search, applications, interviews, paid work, volunteering and internship opportunities and getting the most out of your extra-curricular activities alongside your degree programme when writing your CV;
* a range of personal support services: mentoring, counselling, residence support service, chaplaincy, health service;
* a Centre for Language Study, providing assistance in the development of English language and study skills for non-native speakers;

The Students’ Union provides

* an academic student representation system, consisting of Course Representatives, Academic Presidents, Faculty Officers and the Vice-President Education; SUSU provides training and support for all these representatives, whose role is to represent students’ views to the University;
* opportunities for extracurricular activities and volunteering;
* an Advice Centre offering free and confidential advice including support if you need to make an academic appeal;
* Support for student peer-to-peer groups, such as Nightline.

Associated with your programme you will be able to access support within Southampton Biological Sciences:

In Southampton Biological Sciences you will:

* receive an induction that will introduce you to all our teaching and learning resources you will interface with during your degree as well as ensuring you understand the regulations which govern your study;
* have a personal research supervisor who will advise on choice of taught modules and can provide pastoral support (this is the primary source of support for your research);
* have an allocated academic advisor who can provide an alternative and independent view on your progress. This member of staff will also be your internal examiner at the end of the research programme;
* receive individually tailored guidance from academic staff delivering the taught components of your programme. Each module has an academic coordinator who would be the first point of contact in the event of needing academic support;
* be able to obtain additional support from the senior staff involved in the MRes Advanced Biological Sciences Programme; have a base in a research laboratory proximate to the other team members of your research group – an invaluable source of peer to peer support;
* have a personal e-mail account, web access, and IT support from the University i-Solutions team;
* have access to writing space for writing up your MRes research project;
* attend group meetings in the selected research grouping and research seminars given by visiting speakers;
* The opinions of the MRes students are heard through a number of different forums. Termly meetings are convened by the Director of the Masters programmes who ensures that teaching related issues are diverted to the Staff Student Liaison Committee and that research related issues are directed to the Graduate School;
* There are systems for the support of student learning in Biological Sciences as well as available from central University facilities. Throughout the degree, students with special learning requirements are supported and their ability to complete the degree in full is managed by making appropriate reasonable adjustments to our infrastructure and methods of delivery and assessment.

Methods for evaluating the quality of teaching and learning

You will have the opportunity to have your say on the quality of the programme in the following ways:

* Completing student evaluation questionnaires for each module of the programme (relevant to the taught part of the MRes);

Acting as a student representative on various committees serving as a student representative on the CfBS Graduate School Committee

* Serving as a student representative on Faculty Scrutiny Groups for programme validation;
* Taking part in programme validation meetings by joining a panel of students to meet with the Faculty Scrutiny Group

The ways in which the quality of your programme is checked, both inside and outside the University, are:

* Regular module and programme reports which are monitored by the Faculty;
* Programme validation, normally every five years;
* External examiners, who produce an annual report;
* A national Research Assessment Exercise (our research activity contributes directly to the quality of your learning experience);
* Institutional Review by the Quality Assurance Agency

Criteria for admission

**University Commitment**

The University will at all times seek to operate admissions regulations that are fair and are in accordance with the law of the United Kingdom, and the University's Charter, Statutes, Ordinances and Regulations.

This includes specific compliance with legislation relating to discrimination (e.g. Equality Act 2010) and the University's Equal Opportunities Policy Statement. This includes a commitment that the University will:

* actively assist groups that experience disadvantage in education and employment to benefit from belonging to the University;
* actively seek to widen participation to enable students that do not traditionally participate in Higher Education to do so;
* ensure that admission procedures select students fairly and appropriately according to their academic ability and that the procedure is monitored and regularly reviewed.

#### **Entry Requirements**

The University’s general admission requirements, including information for overseas/European applicants can be viewed on the web page: [www.calendar.soton.ac.uk/sectionIV/admissions.html](http://www.calendar.soton.ac.uk/sectionIV/admissions.html)

The Centre for Biological Sciences’ admissions requirements can be viewed at: [www.southampton.ac.uk/biosci](http://www.southampton.ac.uk/biosci)

The normal entry requirement is at least an upper second class honours degree in Biological Sciences, or a closely related subject. Non-UK applicants will usually have completed 4 years or more in higher education. Students who are of lower second honours degree standard will only be admitted in exceptional circumstances. A key feature of your first degree studies is that they must demonstrate achievement of learning outcomes (both content and level) that will ensure that you can integrate into our teaching and research experience.

Your application to Biological Sciences will include your specification of the area of research you wish to work in. It is assumed that this expression of interest implies that you have an academic and experience background that is suitable for Masters level research in this area. Our admissions process will seek to confirm that this is the case prior to offering you a place.

The selection process will involve close scrutiny of your academic credentials in a process that will include both the academic researcher you identified as being of interest to you and the Post Graduate Admissions Tutor. Typically the process will involve an interview (via Skype for students not available to come to Southampton). The whole process is supported by a Post Graduate Admissions Administrator who remains in touch with students throughout the application process.

A minimum standard of English Language is required for admission to the programme which is identified as a standard against a number of internationally recognised language tests. A list of these may be found at

<http://www.southampton.ac.uk/international/entry_reqs/english_language.shtml>

The decision of whether to offer a place is one made by the academic supervisor, their research manager and the Post Graduate Admissions Tutor. The latter will make the formal offer of a place to you if this is the appropriate course of action.

Students are expected to prepare themselves for the course by private study prior to the start of the course. A reading list will be made available through contact with the nominated research supervisor

International Students and ATAS

International applicants to some undergraduate programmes are required to apply to the Foreign and Commonwealth Office’s (FCO) Academic Technology Approval Scheme (ATAS) for clearance to study this programme in the UK before an application for a Tier 4 visa can be made

An ATAS certificate, once issued, is valid for the purpose of making a visa application for a period of six months from the date of issue. You need only hold a conditional offer when making an application for ATAS. You must ensure that you have received ATAS clearance before making your application for a Tier 4 student visa or your visa application will be refused. The FCO normally takes between four and six weeks to issue ATAS clearance, although it can sometimes take longer.

More information regarding ATAS and the process can be found at:

<http://www.southampton.ac.uk/studentadmin/admissions/atas/>

Career Opportunities

A range of career opportunities are open to you having completed your MRES:

* Biotechnology, pharmaceutical, agricultural industry- depending on specialisation
* Postgraduate research training
* Scientific officer in research laboratories
* Teaching
* Forensic science
* Legal profession
* Business management

External Examiners(s) for the programme

**Name**  Professor Alex Webb (overarching External Examiner for the whole programme)

**Institution** University of Cambridge

Students must not contact External Examiner(s) directly, and external examiners have been advised to refer any such communications back to the University. Students should raise any general queries about the assessment and examination process for the programme with their Course Representative, for consideration through Staff: Student Liaison Committee in the first instance, and Student representatives on Staff: Student Liaison Committees will have the opportunity to consider external examiners’ reports as part of the University’s quality assurance process.

External examiners do not have a direct role in determining results for individual students, and students wishing to discuss their own performance in assessment should contact their personal tutor in the first instance.

**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 s/he takes full advantage of the learning opportunities that are provided. More detailed information can be found in the programme handbook (or other appropriate guide) or online at [www.sussed.soton.ac.uk](http://www.sussed.soton.ac.uk)

Appendix 1: Learning outcomes and Assessment Mapping document template (core / compulsory)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Module Code | Module Title | Subject Specific Intellectual and Research Skills | | | | | | | | Transferable and generic skills | | | | | | | | | |
|  |  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| BIOL6068 | MRes Advanced Biological Sciences Research Project | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | X |

**Appendix:**

**Assessment Methods for optional modules**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Course Code** | **Sem** | **Course Title** | **ECTS/CATS** | **Exam y/n** | **Exam** | **Continual Assessment** | **Continuous Assessment Detail** |
| BIOL6010 | 1 | Applied Ecology | 7.5/15 | Y | 75% | 25% | Critical Evaluation 20% Presentation 5% |
| BIOL6011 | 1&2 | Literature-Based Research Project | 7.5/15 | N |  |  | Preliminary Summary 5% Practical 10% Dissertation 75% Oral Presentation 10% |
| BIOL6021 | 1 | Current topics in Cell Biology | 7.5/15 | Y | 75% | 25% | 3 x coursework (equal weighting) |
| BIOL6022 | 2 | Molecular Pharmacology | 7.5/15 | Y | 75% | 25% | Paper Discussion 15% (0.6) Paper Presentation 10% (0.4) |
| BIOL6023 | 2 | Cellular Signalling in Health and Disease | 7.5/15 | Y | 65% | 35% | Coursework 25% Presentation 10% |
| BIOL6024 | 1 | Selective Toxicity | 7.5/15 | Y | 75% | 25% | Critical Assessment |
| BIOL6025 | 2 | Cell & Genetic Aspects of Animal Development | 7.5/15 | Y | 75 | 25 | Coursework 1 7.5% Coursework 2 7.5% Presentation 10% |
| BIOL6027 | 1 | Regulation of Gene Expression | 7.5/15 | Y | 65% | 35% | Critical Evaluation 25% Oral 10% |
| BIOL6028 | 2 | Global Change Biology: From Molecules to Ecosystems Services | 7.5/15 | N |  | 100% | Research Proposal 75% Report 25% |
| BIOL6029 | 2 | Topics in Ecology and Evolution | 7.5/15 | N |  | 100% | Research Proposal 25% Coursework 75% |
| BIOL6030 | 1 | Molecular Cell Biology | 7.5/15 | Y | 65% | 35% | Critical Evaluation 25% Oral 10% |
| BIOL6031 | 1 | Cell Membranes | 7.5/15 | Y | 65% | 35% | Critical Evaluation 25% Oral 10% |
| BIOL6032 | 2 | Molecular Recognition | 7.5/15 | Y | 65% | 35% | Oral Presentation 20% Essay 15% |
| BIOL6033 | 2 | Molecular and Structural Basis of Disease | 7.5/15 | Y | 65% | 35% | Critical Evaluation 25% Oral 10% |
| BIOL6034 | 2 | Systems Neuroscience | 7.5/15 | Y | 65% | 35% | Critical Evaluation 25% Oral 10% |
| BIOL6035 | 1 | Cellular and Molecular Neuroscience | 7.5/15 | Y | 65% | 35% | Critical Evaluation 25% Oral 10% |
| BIOL6036 | 2 | Neuropharmacology of CNS Disorders | 7.5/15 | Y | 65% | 35% | Essay 30% Debate 5% |
| BIOL6037 | 1 | Pathophysiology of the lung | 7.5/15 | Y | 65% | 35% | Critical Evaluation 25% Oral 10% |
| BIOL6038 | 1 | Immunology | 7.5/15 | Y | 75% | 25% | Research Proposal |
| BIOL6039 | 1 | Cellular and Molecular Pathology | 7.5/15 | Y | 65% | 35% |  |
| BIOL6040 | 2 | Maternal, Fetal and Neonatal Physiology | 7.5/15 | Y | 60% | 40% | Essay 15% Write-up 5% Presentation 10% Written Critique 10% |
| BIOL6041 | 2 | Biotechnology and Therapeutics | 7.5/15 | Y | 65% | 35% | Essay 25% Oral presentation 10% |
| BIOL6042 | 1 | Nutrition in Health and Disease | 7.5/15 | Y | 75% | 25% | Narrative Review 20% Presentation 5% |
| BIOL6043 | 2 | Hot Topics in Nutrition and Heath | 7.5/15 | Y | 75% | 25% | Project 20% Presentation 5% |
| BIOL6044 | 1 | Plant Cell Biology | 7.5/15 | Y | 70% | 30% | PowerPoint presentation 15% Poster and discussion 15% |
| BIOL6045 | 2 | Neurodegenerative Disease | 7.5/15 | Y | 65% | 35% | Written Evaluation 20% Presentation 15% |
| BIOL6046 | 2 | Applied Plant Biology | 7.5/15 | Y | 70% | 30% | Essay 20% Critique 10% |
| BIOL6047 | 2 | Biofilms and Microbial Communities | 7.5/15 | Y | 75% | 25% | Assignment1 12.5% Assignment2 12.5% |
| BIOL6052 | 1 | Quantitative Methods | 7.5/15 | Y |  | 100% | Exercise 1 20% Exercise 2 20% Grant Proposal 60% |
| BIOL6053 | 1 | Current Research | 7.5/15 | N |  | 100% | Research Seminar Summary 25% In-depth Report 1 12.5% In-depth Report 2 12.5% Research Synthesis 50% |
| BIOL6054 | 2 | Techniques and Theory of Field Biology (commence 14/15) | 3.75/7.5 |  |  | 100% | 2014/15 Identification Tests 10% Write-up 60% Group presentation 15% Group demonstration 15% |
| BIOL6055 | 1 | Computational methods for Biological Data Analysis | 3.75/7.5 | N |  | 100% | 2014/15 Project 40% Weekly Test 1 15% Weekly Test 2 15% Weekly Test 3 15% Weekly Test 4 15% |
| BIOL6066 | 1 | Spatial Ecology and Conservation | 7.5/15 | Y | 55% | 45% | Data Interpretation 5% Position Paper 20% Critical Review Paper 20% |
|  |  |  |  |  |  |  |  |

MRes Biological Sciences Programme structure

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **PART 1**  Core  n/a  Compulsory  BIOL6XXX MRes Advanced Biological Sciences Research Project  **PASS** | | | |  |  |
|  |  | |  | |  | **Postgraduate Diploma exit award – at least 60 ECTS**  **Postgraduate Certificate exit award – at least 30 ECTS** |
|  | |  | |  |
|  |  |  |  |  |  |  |
|  |  | **Conferment of Award/Graduation** | |  |  |  |