

Programme Specification

MBiol Biology

Valid from: September 2016

Faculty of Health and Life Sciences

SECTION 1: GENERAL INFORMATION

Awarding body:	Oxford Brookes University
Teaching institution and location:	Oxford Brookes University Gipsy Lane, Headington, Oxford OX3 0BP
Final award:	MBiol (Master of Biology)
Programme title:	Biology
Interim exit awards and award titles:	Certificate of Higher Education, Biology Diploma of Higher Education and BSc Biology, BSc Biology (Honours)
Brookes course code:	MBI
UCAS/UKPASS code:	
JACS code:	C100
Mode of delivery:	On campus
Mode/s and duration of study:	Full time, part time, sandwich
Language of study:	English
Relevant QAA subject benchmark statement/s:	Biosciences 2015
External accreditation/recognition: <i>(applicable to programmes with professional body approval)</i>	
Faculty managing the programme:	Health and Life Sciences
Date of production (or most recent revision) of specification:	February 2017

SECTION 2: OVERVIEW AND PROGRAMME AIMS

2.1 Rationale for and/or Distinctive features of the programme

The MBiol Biology is designed for those students who are already interested in focusing on a career as a professional scientist. The Programme will avail students with an in-depth understanding of a specialised area of biology including Environmental Biology / Conservation, Evolution, Developmental Biology, Cell and Molecular Biology, Ecology, Genetics, Botany or Zoology. It will develop the ability to adapt and apply methodology to solve unfamiliar problems, along with a critical awareness of advances at the forefront of these fields. The Masters level Research Practice module is a key component of the final year, allowing the opportunity to pursue a negotiated and extensive research project within a research active group within the University or an external organisation preparing students for bioscience research and development careers.

The MBIol Biology degree is a four year integrated Masters programme. The Programme is supported by cutting edge facilities and is taught by internationally recognised researchers within the Department of Biological and Medical Sciences (BMS) who integrate research within the delivery of the modules. The programme gives the opportunity to gain a balanced and extended knowledge of the biosciences and critical applications of key biological science concepts. Students have the opportunity to demonstrate competence in a range of practical procedures and techniques including experimental design, execution and interpretation, risk assessment, and good laboratory practice. They have the opportunity to embed theory, hone practical skills and enhance the use of analytical methods and procedures. The programme offers a wide choice of subjects with an extensive range of acceptable or optional modules available during the second, third and final years of the programme. Students will also have the opportunity to develop transferable skills, like communication, leadership, team work which are highly sought after by employers. The programme prepares effectively for professional employment or doctoral studies in the biological sciences.

A BSc provides excellent training for careers both within science and in a wide range of other non-science sectors. However, further study beyond BSc level is becoming increasingly important for professional scientists, and this Programme offers a route to acquire higher-level specialisation and scientific experience sought by employers and UK PhD recruiters.

The first and second year of the MBIol and the BSc Biology are common, allowing transfer from one Programme to the other depending on suitable academic progress. The distinction is predominantly in years three and four. The year 3 Project is designed to particularly develop analytical skills including bioinformatics and data handling, preparing for Masters level Research. An Independent Study module is a compulsory feature to help develop the Masters Research Practice proposal. One of the conditions of approval of the Research Practice proposal is that it will not duplicate any of the work carried out within the Level 6 Project. The Masters level Research Practice module is a key component of the final year, allowing the opportunity to pursue a negotiated and extensive research project within a research active group within the University or an external organisation.

2.2 Aim of the programme

The aim throughout student's study on the programme is to provide an integrative framework for the major disciplines of Biology (Molecular Biology, Genetics, Developmental Biology, Ecology, Evolution and Conservation) and develop a broad knowledge and understanding of the structural and functional mechanisms influencing biological organisation from molecular through to ecosystem levels. There is some flexibility in programme content and emphasis which allows students to stay broad or specialise within Biology.

The programme also aims to provide the opportunity to develop enhanced professional development and employability skills valued by employers such as team working, enquiry skills, problem-solving and creative thinking – all of which can help in a competitive job market

The aim, by the end of the programme, is to provide advanced research training acquired in particular through the Research Practice module where students carry out an extended research project on an original, cutting edge topic related to Biology. The topics broadly split into Environmental Biology, Taxonomy, Evolution and Developmental Biology and Cell and Molecular Biology. Students will get expert supervision working alongside internationally recognised researchers. Students will become part of a research team during project work and will experience working in a thriving research environment, in many cases as part of an interdisciplinary team. Throughout the programme comprehensive skills in formulating, studying and interpreting biological problems and processes in field and laboratory situations, research planning, design and execution of experiments and effective communication are developed.

The additional research training and skills that will be developed give excellent grounding for a PhD or a scientific research career in industry. For example; many science sector employers regard a Masters level degree as a minimum qualification for employment, due to the additional research skills training and experience it represents.

An aim of the programme is also to develop knowledge and understanding of the applicability of biological study to a broad range of scientific and social issues, provide opportunities for international study abroad and facilitate work-related learning by providing opportunities for students to interact with potential employers with for example work experience, industry placement, industry based projects.

SECTION 3: PROGRAMME LEARNING OUTCOMES

On successful completion of the programme, graduates will demonstrate the following Brookes Attributes and will be able to:

3.1 Academic literacy

- Integrate the principal ideas, concepts and methods associated with the biosciences at different levels of biological organisation from the molecular to the ecological and demonstrate a deep and practically-grounded knowledge and understanding in an area of speciality;
- Demonstrate an appreciation of the role and limitations of all aspects of analysis within the biosciences through appropriate application and evaluation;
- Identify and appraise open questions that can be addressed and evaluate the significance of experimental results in the context of previous work;
- Discuss, integrate and apply knowledge from different disciplines including chemistry, physics and mathematics to biological questions, suggesting new concepts or approaches;
- Demonstrate originality in the application of knowledge, and understanding of how the boundaries of knowledge are advanced through research (also 3.2);

3.2 Research literacy

- Research, interpret, analyse and critically evaluate the literature to integrate information from a variety of sources to construct an evidence based coherent thesis on a scientific topic (also fits 3.1);
- Undertake independent research using appropriate methodologies and analyses within the biosciences that take into account the principles underlying biological processes that are appropriate for Biology;
- Independently adapt skills in data collection in the field and the laboratory to multiple contexts;
- Apply statistical analyses in innovative ways to different kinds of biological data;
- Critically evaluate the research of others and generate new contributions to professional knowledge consistent with being an expert in the field;
- Employ, independently and appropriately, a range of experimental approaches to solve new biological problems in the field or laboratory while demonstrating knowledge and appreciation of, and adherence to, accepted procedural protocol, conduct and performance;
- Appreciate the roles and limitations of different experimental design strategies, practical methodologies and analytical approaches, through appropriate application, interpretation and evaluation.

3.3 Critical self-awareness and personal literacy

- Exercise initiative and personal responsibility (also 3.5);
- Critically evaluate their own knowledge and research as well as that of others;

- Work with others, taking both leadership and supportive roles to take strategic, analytical and creative approaches to problem solving;
- Employ effective interpersonal communication skills in order to communicate research effectively in different written formats and oral presentations for different audiences, including writing full research proposals, abstracts, and thesis;
- Self-manage, through setting personal goals and through management of time, tasks and resources;
- Reflect upon learning experiences and apply learned experience to guide personal development, workplace practice and longer term career objectives.

3.4 *Digital and information literacy*

- Search, appraise, and evaluate library and web-based resources to prepare and communicate findings;
- Access and utilise databases and understand the significance and limitations of them to analyse biological datasets;
- Use a range of professional packages to perform advanced analysis techniques in research;
- Select appropriate study designs and IT approaches to address complex questions;
- Organise and analyse biological data and present it in a clear, logical and concise manner;
- Effectively communicate using a variety of media (including oral presentation) to targeted audiences.

3.5 *Active citizenship*

- Learn and think independently as part of a commitment to continuing professional and career development (also 3.3);
- Understand and promote the importance of global data sharing through its submission and access of public databases for the benefit of all;
- Appreciate ethical, social and legal aspects of the subject and be able to critically evaluate and debate them;
- Understand and adhere to legislation regarding health and safety in the laboratory and the field.

SECTION 4: PROGRAMME STRUCTURE AND CURRICULUM

4.1 Programme structure and requirements:

Year 1 and 2 are the same as our BSc Biology degree and provide a foundation in the subject. In Year 3 students study compulsory and optional modules, like the BSc Biology degree, but the U14699 Project should include a large component of data handling and/or bioinformatics. U14588 Independent study is compulsory and is designed to prepare for the Research Practice in the fourth year (P10501). In Year 4 a compulsory extended research project (80 credits) is undertaken within a research active group on an original, cutting-edge topic specific to one of the following areas: Environmental Biology / Conservation, Evolution, Developmental Biology, Cell and Molecular Biology, Ecology, Genetics, Botany or Zoology. This research project comprises two thirds of the final year and develops research skills in greater depth and as well as substantial subject-specific specialisation, preparing students for a career in scientific research. Students will then select 40 module credits from a range of Masters level modules (all assessed by coursework only).

	Year 1 (Level 4)	Year 2 (Level 5)	Year 3 (Level 6)		Year 4 (Level 7)	
	Compulsory and recommended/acce	Compulsory and acceptable	Preparation for M level Project	Extended Research	Choice of M level	

	pt-able modules as for BSc Biology		modules as for BSc Biology	using U14588 Independent study module	Project	modules
	120 credits	120 credits	105 credits	15 credits	80 credits	40 credits
Total credits	120	120	120		120	

Level 4

Module Code	Module Title	Credits	Status*	Semester of delivery
U14501	Biodiversity	30	Compulsory	1&2
U14502	Biology of Cells	30	Compulsory	1&2
U15503	Science in Practice	15	Compulsory	1&2
U15504	Science by numbers	15	Compulsory	1
U15501	Chemical Principals of the Environment	15	Alternative C.	1&2
U15502	Field Course: Identification and Methodology	15	Alternative C.	2&3
U14505	Chemistry of Cells	30	Alternative C.	1&2

*students need to have two credits from U15501, U15502, U14505

Level 5

Module Code	Module Title	Credits	Status**	Semester of delivery
U15531	Molecular Biology	15	Alternative C.	1
U14533	Microbiology	15	Acceptable	2
U14535	Plant Science	15	Alternative C.	1
U15532	Genetics	15	Alternative C.	1
U15534	Developmental Biology	15	Alternative C.	2
U15552	Animal Behaviour	15	Alternative C.	1
U15539	Work Experience	15	Acceptable	1 or 2
U15520	Environmental Processes, Pollution and Climate Change	30	Acceptable	1&2
U15528	Field Course: Surveys and Licensing	15	Acceptable	2&1
U15529	Research Methods for Biology and Environmental Sciences	15	Compulsory	1&2
U15553	Threatened Species	15	Acceptable	1
U15536	The Context of the Cell	15	Alternative C.	2
U15535	Data Science and Bioinformatics	15	Compulsory	1

students need to pass **at least 4 out of the 6 alternative compulsory Level 5 modules

Students have the option of doing a semester or two semesters on international study exchange during the second year of the Programme accumulating credits and without having to extend the duration of study.

The following is compulsory for BSc Honours & MBIol for Sandwich mode students only:

U14565 Industrial Experience Semesters 1 and 2

Level 6

Module Code	Module Title	Credits	Status	Semester of delivery
U14699	Project	30	Compulsory	1&2

U15571	Evolution and Animal Development	30	Acceptable	1&2
U15584	Environmental Change: Field-Work and Research	30	Acceptable	1&2
U14584	Advanced Topics in Cell Biology	15	Acceptable	2
U14587	Biotechnology	15	Acceptable	1
U14588	Independent Study in Life Sciences	15	Compulsory	2
U15591	Advanced Topics in Wildlife Conservation	15	Acceptable	1
U14673	Enterprise Skills for Life Scientists	15	Acceptable	1
U15570	Science and Humanity	15	Acceptable	2
U15589	Environmental Consultancy	15	Acceptable	1&2

Level 7

Module Code	Module Title	Credits	Status*	Semester of delivery
P10501	Research Practice	80	Compulsory	1&2
P10101	Advanced Molecular Techniques	20	Optional	1
P10204	Biodiversity and Ecosystem Services	20	Optional	2
P10201	Ecology for Conservation	20	Optional	1&2
P10202	Taxonomy & Identification	20	Optional	3,1,2
P10288	Independent Study	20	Optional	1 or 2
P10401	Research Methods*	10	Optional	1
P10404	Bioinformatics	20	Optional	1
P10403	Molecular Ecology and Population Genetics*	10	Optional	1
P10402	Developmental Biology	20	Optional	1

*because P10401 and P10403 are the only 10 credit modules they need to be chosen together.

4.2 Professional requirements

Not applicable

SECTION 5: PROGRAMME DELIVERY

5.1 Teaching, Learning and Assessment

As a biologist on the MBiol Biology programme students will have access to our discipline-leading research facilities within our newly refurbished laboratories, for example; confocal fluorescence and electron microscopes, high-speed computers and server access for bioinformatics and analyses of large datasets, equipment for molecular genetic analyses and tissue culture and whole organism growth facilities. Students will also have opportunities to access field study sites from around the world. Students will work alongside experienced research scientists as part of a thriving research team.

Teaching focuses on applying theory in practical settings, either in the lab or out in the field, developing skills for research and employment. There is the opportunity to gain a wide range of skills introduced, developed and then practiced through the levels of the degree. These include molecular techniques for the study of DNA, RNA and proteins, advanced light and electron microscopy, field-based methods for species and landscape assessment, and cutting edge methodologies for the study of evolution and developmental biology (Academic literacy). Throughout, there is a focus on the application of fundamental biology to real life issues.

Students have the opportunity to embed theory, hone practical skills and enhance the use of analytical methods and procedures through critical analysis of the literature, applying mathematics, collecting data

and analysing it and the effective use of statistics and bioinformatics developing Digital and information literacy. Active citizenship is developed through understanding the importance of global data sharing through its submission and access of public databases for the benefit of all. The department has internationally recognised experience in science communication and public engagement, students are encouraged to help with activities (offline and online) which further develops active citizenship.

The programme is designed to develop strong theoretical (Academic literacy) and laboratory/field skills (Research literacy) in modern biosciences through lectures, assignments and practical work which will equip students with the ability to develop and apply methodologies and be decisive in solving research questions in any professional situation (Critical self-awareness and personal literacy).

The standards that are expected in research are also widely taught and practised activities with clear progression through the programme (e.g. scientific report writing as from year 1, drafting research proposals in year 2, consultancy activities and research projects in year 3) leading to the Research Practice which provides an opportunity to undertake substantial research specific activities (developing Research literacy) within a research active environment. There is also the opportunity for students to attend weekly research-focused seminars delivered by members of staff or invited speakers (developing further Academic and Research literacy). The Research practice will develop the skills needed for a successful research project outcome and discuss the impact of its findings, scientifically and ethically (Active citizenship). Students will be instructed in research skills and will be encouraged to think of their research in context. Scientists on a career path need to be innovative and have the ability to incorporate new technologies into research which often depends on having a good general knowledge of an array of techniques.

The Faculty of Health and Life Sciences has a very strong cluster of research in the biosciences with particular focus on genome science, molecular biology, developmental biology, evolutionary biology, computational biology, bioinformatics, bio-imaging, cell biology, botany, ecology and conservation biology and commercial applications. The activities of our research groups underpin our teaching and support the development of research literacy.

The teaching and learning methods used in the programme reflect the wide variety of topics and techniques associated with Biology. Lectures, laboratory sessions, student oral presentations, coursework assignments and workshops provide the framework, essential background and knowledge base for each module and students are encouraged to probe more deeply by reading widely. Analysis, synthesis and application of material introduced in lectures is achieved through practice and syndicate work with tutors and peer review.

Each module is worth a number of level credits (120 per year). The modules are designed so that each credit equates to approximately 10 hours of learning. Therefore a module worth 20 credits is expected to require 200 hours of learning. Some of these hours are through class contact and laboratory/field practical time and others will be through independent study. Assessment weightings for coursework (and any final examination) reflect judgements on the typical study time expected for satisfactory completion of a piece of work.

There are on average 20 hours of lectures and 12 hours of practicals per single credit module. We have three residential field courses included in our module mix and these involve more practical time. There is a more or less even split between modules that are 100% coursework and modules that are assessed part by coursework and part by a written exam within the first three years; the Masters level modules are 100% coursework. For each module, a pass grade is achieved (40% for Level 4,5,6; 50% for Level 7) from the aggregate of all the marks achieved within the module unless otherwise stated in the module description.

Reflective independent learning is encouraged through the use of a teaching approach that encourages interdisciplinary thinking and integration of knowledge and understanding, assignments that require a reflective element (e.g. group work and project work, and reflective diaries) and through use of self, peer and staff formative and summative feedback on assignments (developing Critical self-awareness and personal literacy).

Active citizenship is encouraged and nurtured in a number of ways. There is a focus throughout the programme on developing an appreciation of ethical, social and legal aspects of the biosciences and the ability to critically evaluate and debate them. We also ensure that students understand and adhere to legislation regarding health and safety in the laboratory and the field. Study abroad opportunities expose to different cultural perspectives. The inclusion of a 'Science and Humanity' module at Level 6 encourages thinking beyond students own cultural perspectives. The programme also includes a field-course module in the Cevennes region of southern France. This helps broaden experiences by encountering unfamiliar assemblages of plants and animals influenced by different regional cultural and social environmental attitudes.

All modules make use of the Brookes Virtual Learning Environment (for module resources, assessment criteria, quizzes, coursework submissions and feedback). Assessment methods include reviews of the literature, laboratory/field notebooks, scientific reports, posters and oral presentations. All these activities develop Digital and Information literacy.

Assessment is designed to 'shape and develop' learning and not simply measure it (the notion of assessment for learning as well as assessment of learning). The role of formative feedback (i.e., feedback comments which may or may not be associated with a mark/grade) is central to facilitating student learning through assessment. Modules include formative feedback on assignments that includes generic/skills elements (encouraging and facilitating 'feed-forward' and transferability to other possibly different tasks). Modules include at least one assignment where students need to engage with feedback provided on earlier work. Assessment seeks to measure students' progress towards and ultimately their acquisition of programme outcomes and for this reason assessment decisions are co-ordinated at programme level, while seeking to ensure that assessment methods are well integrated in each module (the notion of constructive alignment – the interdependence of learning outcomes, learning methods (teaching) and assessment), developmental and balanced. Students' understanding of the assessment process (assessment literacy) is promoted through their involvement in assessment (self and peer assessment).. We are committed to providing clear assessment criteria, and useful and timely feedback on all student work.

Continued and regular discussions between academic programme staff ensure that the programme is characterised by an appropriate breadth and depth of content that is informed by relevant benchmark statements and the latest research. The quality of academic provision for students will continue to be assessed regularly by programme teams, principally through student evaluation of each module, and through critical evaluation of the annual External Examiner reports.

5.2 Assessment regulations

The programme conforms to the University Regulations for Undergraduate Modular Programmes (<http://www.brookes.ac.uk/regulations/current/specific/b2/>) for Levels 4 to 6 and to the University Regulations for Taught Postgraduate Programmes (<http://www.brookes.ac.uk/regulations/current/specific/b4/>) for Level 7.

Integrated Masters degree programmes are Level 7 qualifications, in which study at Bachelors level is integrated with study at Masters level. They are normally designed to progress from Level 4 to Level 7, accruing 120 credits at each level, to an overall minimum total of 480 credits. Exit awards of Certificate of Higher Education, Diploma of Higher Education and Bachelors Degree (with or without Honours) are

available on achievement of the general credit requirements at Levels 4, 5 and 6 respectively. The normal duration of study is four years full-time.

Progression from first year to second year requires students, in addition to module program regulations to pass all their Level 4 modules. A minimum average mark of 60% at the end of Year 2 will normally be required to progress on or transfer to the programme. A confirmation point at the end of Level 6 (Year 3) will normally require a minimum project module mark of 60% and an average programme mark of 60% for progression onto Year 4 (Level 7). The pass mark for all undergraduate modules is 40% and for all postgraduate modules is 50%. The MBIol award will be classified as a Pass for averages 50 to 59%, Merit from 60 to 69% and Distinction for averages 70% and above. Students who register on the MBIol programme may transfer to the BSc Biology programme at any time, including their final year and exit at BSc level. If students want to graduate with the interim exit award of BSc Biology they need to inform student central in advance of the Examination Committee.

SECTION 6: ADMISSIONS

6.1 Entry criteria

Minimum offer:

- GCSE Mathematics, English Language and Double Integrated Science or equivalent at C grade minimum

Typical offers:

- ABB at A-level usually in minimum two science or science-related subjects
- A at A-level plus 1 12 unit Vocational A-level at grade BB
- equivalent grades in other recognised qualifications

Preferred science subjects include Biology, Chemistry, Environmental Science, Geography, Mathematics and Physics.

In its mission statement the university has highlighted the need to widen access to higher education to those traditionally underrepresented among students. The department's provision to enable this strategy is to offer a one year foundation in collaboration with Abingdon and Witney College. Students who have come through the foundation year and shown significant achievement on the BSc Biology Programme can transfer into the MBIol Biology at the end of the second year, with no need to extend their Programme of study.

Admissions with Credit (Accreditation of Prior learning)

Applicants with relevant prior learning are welcome to apply and start the programme with exemption of some modules or the whole of Year 1. In certain exceptional cases it may be possible to give credit to Level 5 modules as well as for Level 4 but it will not be possible to gain credit for Level 6 modules.

Students who register for our BSc Biology programme may transfer to the MBIol Biology. This will normally occur at the end of the second year if they meet the progression criteria and availability of places.

English Language Requirements

IELTS Level 6.0 overall with 6.0 in reading and writing, 5.5 in listening and speaking.

For further details of the University's English language requirements see:

<http://www.brookes.ac.uk/international/how-to-apply/english-language-requirements/>

6.2 DBS checks

Not applicable

SECTION 7: STUDENT SUPPORT AND GUIDANCE

Our Personal and Academic Support System (PASS) is gaining national and international recognition for its proactive approach to personal tutoring. It recognises that students need to make various adjustments as they move into higher education, whether from school or employment.

The system encompasses three elements:

- A structured group tutorial programme focussing on professional and study skill development
- An academic adviser who will help the students to plan their degree programme and future career
- Interaction with other students within a small group on the programme.

The first stage includes regular tutorials covering a wide range of subjects including science, research and study skills, understanding assessment criteria and making the most of coursework feedback. Our programme also helps students adjust to university life by developing their transferable skills.

Secondly, our academic staff monitor student progress regularly to check that they are maximising their potential. If they experience academic difficulties we can arrange for them to receive academic mentoring support.

Thirdly, if students are faced with challenges that affect their ability to study, such as illness, bereavement, depression, financial difficulties or accommodation issues, we will work with them in finding a way forward. The student support co-ordinator is trained for and leads on such issues often liaising with the academic advisors.

There are also a number of general support services including learning and personal support services. These range from academic advisers and support co-ordinators to specialist subject librarians, career advisers and other learning support staff all designed to ensure that students get the best out of their studies.

In addition to this on arrival the students are welcomed into the University and onto their programme with an induction programme and the students are made aware of the many sources of information such as programme handbooks and individual module handbooks as well as their key academic and support staff.

SECTION 8: GRADUATE EMPLOYABILITY

The employment market for graduates in the biosciences is buoyant. The MBiol Biology offers a solid foundation for postgraduate entry to a scientific career. Industries and organisations seeking bioscientists for research and development careers include:

- Biopharmaceuticals
- Bioscience, biotechnology and healthcare industries
- Chemical
- Environmental agencies
- Agri-environment industries

- Food and drink
- Horticulture
- Hospitals and public health laboratories
- Government or charity-funded research laboratories and institutes
- Universities and research institutes

We work closely with senior professional scientists as part of our Bioinnovation Hub (see below), who advise us on what they look for in graduates and on employability-related skills within our Programmes. Our partners come from a range of organisations, from larger multinational organisations to smaller and medium sized enterprises; including the Universities spin-out companies (OET, Wildknowledge) and the Centre for Ecology, Environment and Conservation (CEEC).

We know from talking to employers that when they recruit they are looking for self-assured, flexible, independent-minded graduates; problem solvers with the skills and knowledge that will benefit their organisations. Our graduates are desirable to a broad range of scientific employers.

SECTION 9: LINKS WITH EMPLOYERS

- Work placements/opportunities for work-based learning: There is still the opportunity to undertake a Year in Industry or Study Abroad placement on the MBiol degree programme. These take place between Year 2 and Year 3. The extra year is also covered by The Students Loan Company so there is no need to worry about sourcing extra funding for these opportunities.
- To help with this we have the Bio-innovation Hub which is an initiative to enhance engagement with the Life Sciences industry to increase research income from industry and improve the employability of our students with active engagement from the local bioscience sector. This is through a commitment to provide live projects and placements by a wide range of local industry partners ranging from Hospital labs and Biotechnology companies through to Wildlife Trusts and local government. This provides industry-supported, real world projects preparing students for employment; and a resource where industry and students can generate original, practical solutions to real world problems.
- To date in our database around 200 Life Sciences organisations are registered but this is growing all the time. We have well developed association with many of the registered organisations. For example, two students have had work experience with Kew Gardens, students have benefitted from guest speakers from Kew and several members of their staff are registering with us for PhDs by publication.
- The Oxford Brookes Student Bioinnovation Hub also underpins our links with practitioners in the region such as environmental and ecological consultancies and the statutory and charitable conservation sectors. Through the Hub we prioritise innovative application of scientific expertise to developing practical tools for relevant industries.
- Site visits to and visiting speakers from relevant industries/professions
- Many of our Level 6 Projects (i.e. in Year 3) are linked to Industry and the aim is to extend this with the Level 7 Research Practice.

SECTION 10: QUALITY MANAGEMENT

Indicators of quality/methods for evaluating the quality of provision

Students will be working alongside world-class experts who bring the latest cutting-edge research to teaching and learning. In the 2014 Research Excellence Framework (REF) the research in the

Department was included in the Biological Sciences submission and 94% of submitted research was “world leading” or “internationally excellent”. Our research projects have the potential to make a major impact on global society.

Staff have extensive complimentary experience across this interdisciplinary field, with the core members of the teaching group having over 200 publications, including peer reviewed research, review and perspective papers, reports to the EU and books. They have also been successful at gaining research funding from external bodies including ERC, FGF, Volkswagen, NERC, BBSRC, Royal Society, Leverhulme Trust, the EU, Defra, British Ecological Society and Natural England. Staff also work with public and private sector organisations such as Natural England and Butterfly Conservation, and work with Environmental Consultancies.

The Faculty of Health and Life Sciences programmes benefit from rigorous quality assurance procedures and regularly receive excellent feedback from external examiners, employers, and students.

Quality assurance of the Programme is addressed in a number of ways:-

- Subject Committee meetings held once a semester to enable staff and students to feedback on the programme.
- A rigorous annual and periodic review process to ensure the currency and standards of the programme.
- An external examining process that follows the HE sector requirements and the University procedures to ensure fairness and consistency of assessment, and comparability with other HE institutions.
- Systematic end of module and end of programme monitoring and evaluation.
- Employer/other stakeholder engagement through the Bioinnovation Hub.