MSc Biopharmaceutical Development
Programme handbook
2017-18
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INTRODUCTION AND WELCOME

Welcome to the MSc in Biopharmaceutical Development at the University of Leeds. We hope that you find the time you spend with us both enjoyable and rewarding and that you gain both professionally and personally from the course.

This handbook provides information on the programme structure as well as administrative procedures. It is designed to supplement the information contained in the Taught Student Guide. Please spend some time reading through the various sections of both this handbook and the Taught Student Guide; you will need to refer to them through the duration of your study. You should also look through the Faculty of Biological Sciences (FBS) Masters area on the Virtual Learning Environment (VLE) (see Section 2.3.1 of this handbook). This area contains information relating to assessments, learning resources, and the pastoral support available to you.

This is an exciting new programme, delivered by the Faculty of Biological Sciences partnered with a leading multi-national Contract Research Organisation. Expertise is also drawn from other areas of the University including the School of Chemistry, Leeds University Business School and the Faculty of Medicine and Health (Clinical Trials Unit). It combines the excellent reputation in teaching and research of the University of Leeds with the expertise of Industry to deliver a programme designed to accelerate graduates into biopharmaceutical industry roles. There will be plenty of opportunities to develop your theoretical and practical knowledge-base and develop project-management, leadership and communication skills. All of these should position you well to move onto the next stage of your careers.

I hope that you will work hard and benefit a great deal from your programme, enjoy the research culture of the University and interactions with Industry, enjoy Leeds and the surrounding area, develop longstanding friendships and be happy in the Faculty.

With kind regards,

Dr Kenneth McDowall
Pro-Dean of Faculty of Biological Sciences
1.1 Programme Aims

The MSc Biopharmaceutical Development programme is designed to train talented scientists wishing to pursue a career in drug development within the biopharmaceutical industry globally. On completion of the Masters, students should be able to apply what they have learned to any biologics medicine development job in a biotechnology, contract manufacturing, contract research organisation or pharmaceutical company and enhance the value they add to that organisation, with immediate effect. Overall, the programme aims to equip students with the skills and expertise to become future leaders in biologics research and development.

To meet this aim, the course has been designed to provide a comprehensive and integrated understanding of the industrial pathway of biological drug discovery, development and exploitation. Modules cover each of the major technical functions of this industry (discovery and pre-clinical testing, manufacturing, clinical safety and efficacy, laboratory analytical skills). Further modules introduce the course & industry (pathway, regulatory framework, economic value, and societal drivers), address commercialisation of biopharmaceutical products and a final taught module that integrates topics in the form of project work submitting a new biological entity to a regulatory body. This will provide students with a deep understanding of core elements of the discipline, and a good appreciation of the broader context and regulatory framework of the industry. It is highly interdisciplinary, and will equip students to work in such teams. On completion of the taught elements, students will then undertake a 12-month work placement in industry, to consolidate their experience in the workplace, and to perform project work in a regulated environment.

Upon completion of the programme, students will have:

- developed an integrated and comprehensive understanding of the process of biological drug development;
- critically evaluated the current science underpinning a range of technical areas of biological drug development including discovery, manufacturing, pre-clinical testing, clinical safety and efficacy;
- developed a sophisticated understanding of the legal regulatory framework and its implementation in biological drug development;
- demonstrated advanced knowledge of the commercial and social drivers shaping the biopharmaceutical industry;
- demonstrated mastery in a range of practical techniques appropriate to biological drug development;
- designed, planned and executed an independent and in-depth research project in an area of biological drug development;
- applied cutting-edge knowledge and practical techniques of the biological drug development process in an industrial setting;
- developed advanced problem-solving, interpretation and data analysis skills, demonstrated through a range of activities including design projects, pre-clinical and clinical proposals and data generated during research work;
- demonstrated advanced ability to communicate information and defend ideas in writing and verbally evidenced through the production of written reports, oral presentations and a major written dissertation;
- taken a proactive and self-reflective role in working to develop professional relationships with others; including the ability to lead and work in teams.
1.2 Programme Staff

This programme is overseen by two Programme Leaders, one representing academia and one representing Industry. Both programme leaders are listed below. All programme-related queries should be directed to Professor John Colyer in this first instance.

- Professor John Colyer (j.colyer@leeds.ac.uk) – representing Academia
- Dr Sian Estdale – representing Industry

A list of module managers with their contact details is included in Appendix 1.

1.3 Semester dates

<table>
<thead>
<tr>
<th>Registration/induction week</th>
<th>Monday 18th – Friday 22nd September 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester 1 teaching</td>
<td>starts on Monday 25th September 2017</td>
</tr>
<tr>
<td>Christmas Vacation</td>
<td>9th December 2017 – 7th January 2018</td>
</tr>
<tr>
<td></td>
<td>Although there is no formal teaching during this time period, you may have assessments to complete</td>
</tr>
<tr>
<td>Semester 2 teaching</td>
<td>starts on Monday 22nd January 2018</td>
</tr>
<tr>
<td>Easter Vacation (field courses)</td>
<td>17th March – 15th April 2018</td>
</tr>
<tr>
<td></td>
<td>Although there is no formal teaching during this time period, you may have assessments to complete</td>
</tr>
<tr>
<td>Research Project Module (Placement)</td>
<td>Starts After the Easter Vacation (typically 1st May 2018) and continues until end-April 2019.</td>
</tr>
<tr>
<td>Programme Year ends June 2019 with Graduation taking place July 2019.</td>
<td></td>
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</tbody>
</table>
1.4 Programme Structure

The MSc Biopharmaceutical Development programme is 18 months in duration. The first 6 months (Sept-Mar) will be taught modules delivered within the University of Leeds (100 credits), followed by a period of 12-months placement (80 credits) in industry or in university laboratory on a collaborative project with industry.

An outline of the programme is included below.

<table>
<thead>
<tr>
<th>Semester 1 (Sept-Jan) (60 credits)</th>
<th>Semester 2 (Jan-Mar) (40 credits)</th>
<th>Semester 2 &amp; 3 (Apr-Apr) (80 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL5164M Biopharmaceutical Development Pathway (5 credits)</td>
<td>BIOL5180M Biopharmaceutical drug discovery and Pre-clinical testing (20 credits)</td>
<td>BIOL5267M Biopharmaceutical Development: Clinical (10 credits)</td>
</tr>
<tr>
<td>BIOL5181M Manufacturing Biopharmaceuticals (15 credits)</td>
<td>BIOL5280M Integrated Drug Development Plan (20 credits)</td>
<td>BIOL5396M Research project/placement (80 credits)</td>
</tr>
<tr>
<td>BIOL5269M Commercialising Biopharmaceuticals (10 credits)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL5320M Practical skills for a regulatory environment (20 credits)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1.5 Description of each module

Compulsory Modules

BIOL5164M Biopharmaceutical Development Pathway
Module Manager (Academic): Prof Alex Breeze
Module Co-Lead (Industry): Dr Sian Estdale
This module will set the scene for the full programme by providing an overview of the drug development pathway from research and development to marketed product. The focus will be on biologics (antibodies, vaccines, gene therapy, ADCs) although small molecule drugs will be referenced to illustrate how their development differs from biologics. This module will also introduce the medical, scientific and economics drivers - costs, number of leads, attrition rate - associated with drug development. It will introduce the regulatory environment within which biologic drug development is practiced covering GLP, GCP, GMP, and provide a context for these through reference to landmark cases.
Teaching: lectures, tutorials and fieldwork
Assessment: essay (90%), oral presentation (10%)

BIOL5180M Biopharmaceutical Drug Discovery and Pre-clinical Testing
Module Manager (Academic): Professor Nicola Stonehouse
Module Co-Lead (Industry): Dr Matthew McCourt
The module objectives are to:
- Provide an overview of the industrial drug discovery process.
- Provide an introduction to the aspects of a target that are important in the assessment of its link to a disease and its mechanism of action, including developing an understanding of the role of the target in biological processes associated with health and disease and the tractability of targeting it.
• Provide an overview of the biologics drug discovery pipeline, covering the common set of biologics (antibodies and their alternatives, vaccines, peptides and gene therapies).
• Provide an introduction to the preclinical testing requirements for biologics and how this enables clinical development and ultimately marketing application.
• Provide an understanding of the different testing requirements for different biological products (e.g. monoclonal antibodies, recombinant proteins, gene therapy products and vaccines).
• Gain an understanding of analytical techniques to examine pharmacokinetics, toxicokinetics and anti-product antibodies.
• Understand how the non-clinical data translates to starting dose for human trials.
• Understand the need to bring together a cross functional team to build a complete understanding of the risk/benefit for a particular project, in doing this it will introduce some of the key roles within the biopharmaceutical industry that make up project teams and how they interact.
• Appreciate the need for team and individual working to research and make recommendations about biologics drug discovery programmes and to develop plans for the experimental delivery of such a programme.

**Teaching:** workshops, lectures and tutorials

**Assessment:** report (60%), presentation (40%)

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**BIOL581M Manufacturing Biopharmaceuticals**

**Module Manager (Academic):** Professor John Blacker

**Module Co-Lead (Industry): Dr Michelle Scott**

The module on Manufacturing of Biopharmaceuticals will provide an in-depth introduction to Biologics manufacturing. The ability to quickly develop and manufacture economically new therapeutics is becoming ever more critical and this course will prepare students with the background required for a career in this area. Specifically it will build on knowledge provided earlier in the course on the types of biologics used, and consider how these can be scaled-up. The module will address issues such as mode of operation, process variables and optimisation, material inputs and outputs, analytics and control, secondary processing and formulation, regulatory safety and legal aspects. The learning outcome is a heightened and detailed awareness of the issues faced during scale-up and manufacture.

**Teaching:** fieldwork, presentation, lectures and tutorials

**Assessment:** group project (70%), oral presentation (30%)

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**BIOL5267M Biopharmaceutical Development: Clinical**

**Module Manager (Academic): Dr Sarah Brown**

**Module Co-Lead (Industry): Dr Karen Cornelissen and Dr Chris Ward**

The module will provide an outline to the principles of clinical trial design and conduct in the setting of biologics development. The emphasis will be on understanding the practical issues that arise through real examples backed up with the relevant theory. It will expand on the introduction provided in the Biopharmaceutical Development Pathway module, and link the Pre-Clinical Drug Development and Commercialisation of biopharmaceuticals modules, providing grounding in the basic specialist knowledge and skills required by those working in the biopharmaceutical industry.

**Teaching:** fieldwork, seminar and tutorial

**Assessment:** essay (50%) and report (50%)

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**BIOL5269M Commercialising Biopharmaceutical Products**

**Module Manager (Academic): Professor John Colyer**

**Module Co-Lead (Industry): Dr Luke Kempton**

This module aims to explore how economic value is created in the biopharmaceutical industry. It aims to explore how intellectual property rights are used to maximise economic value, and how
business strategies align with external drivers to bring economic (and healthcare) benefits from proprietary products.

Teaching: lectures, tutorials and seminar
Assessment: report (40%), reflective log (25%), report (35%)

BIOL5280M Integrated Drug Development Plan
Module Manager (Academic): Professor John Colyer
Module Co-Lead (Industry): Dr Michelle Scott and Dr Chris Ward
This module integrates the pre-clinical aspects of biopharmaceutical product development. Students will create a development plan for a biological medicine to enable its progression to first time in human clinical trials. This will include writing a target product profile, manufacturing, non-clinical and clinical plans; with consideration of the regulatory aspects.

Teaching: seminars and tutorials
Assessment: presentation to regulatory authority: documentation (20%), presentation to regulatory authority: oral group presentation, Q&A and minutes (20%), and integrated plan for the module (60%)

BIOL5320M Practical Skills for a Regulatory Environment
Module Manager (Academic): Dr Darren Tomlinson
Module Co-Lead (Industry): Dr Sian Estdale
The module will provide students with hands-on practical experience of performing biopharmaceutical analyses consistent with standards applied in a regulatory environment. Students will perform a series of experiments demonstrating stages along the drug development pathway. Topics covered will include: assay validation (accuracy, precision, robustness, in-specification), followed by three practical strands; one focusing on molecular/biophysical protein characterisation (GMP-focus; antibody purification, SDS-PAGE, and protein quantification), the second on ELISA assays, and the third on cell-based assays (GCP-focus cell growth/viability). The practicals will be supported by a series of lectures and workshops covering the theory underpinning the techniques, analysing data and feedback on reports. Project management will form a core part of the module and students will be expected to set and meet objectives to defined timescales, working individually and occasionally in teams. Learning will be assessed during the practical sessions, written reports after each practical and a final viva in a format suitable to a client or regulatory authority evaluating whether a defined molecule has attributes lending itself to being a biopharmaceutical and therefore meriting further Research and Development investment. Students will also be expected to complete a set of practical competencies and maintain a log reflecting on project progress and team performance.

Teaching: workshops, presentation, lecture and practicals
Assessment: report (70%), oral presentation (30%)

BIOL5396M Research Project
Module Manager (Academic): Dr Al Pickles
This module is designed to provide students with experience of practical research and work through the completion of a 12 month work placement. The placement will involve a substantial research project (80 credits) completed in industry (path 1) or an industrial-focused research project hosted within academic laboratories with the University of Leeds (Path 2). During this placement, students will become an employee of the organisation (path 1) or will receive a stipend (path 2) and will be subject to their working practices and conditions. Through the project, students will gain in-depth practical experience of at least one technical function of the drug development process (pre-competitive research, discovery, manufacturing, pre-clinical testing, clinical safety and efficacy). In addition, the placement will provide substantial opportunities to enhance a range of transferable skills including developing professional relationships with others, teamwork, and communication skills.

Teaching: induction session, supervision meetings, practicals and seminar
Assessment: project proposal (10%), oral presentation (10%), dissertation (80%)
1.6  Teaching Timetables and Module Handbooks

Teaching will commence on Friday 22nd September 2017. The provisional teaching timetables can be accessed via the student services website: www.leeds.ac.uk/timetable.

You will be supplied with a module outline for each module that you register on during semester 1. These will typically contain information relating to module content and assessments. You will be able to access the module outlines and the timetables electronically through Minerva (see section 2.3.1).

1.7  Learning and Teaching on the Masters Programmes

Our Masters programmes utilise a wide range of learning and teaching methods. These include; lectures, tutorials, seminars, workshops, demonstrations, practical classes and research project work. From the programme outline, you will see that each module is allocated a credit rating (e.g. 10 credits, 20 credits, 80 credits). In terms of learning and teaching, 1 credit is equivalent to 10 hours of study and therefore a 10 credit module is equivalent to 100 hours of work, a 20 credit module is equivalent to 200 hours of work and so on. These hours of study include face-to-face teaching (such as lectures, tutorials, practical classes) and private study time required to conduct any reading associated with the classes and the time taken to complete the assessment tasks. There is strong emphasis within the programme on self-directed learning and therefore you will be expected to do a substantial amount of work independently.

The programme is assessed through continuous in-course assessments, and there are no formal end of module exams. You will be expected to complete a number of different assessment activities for each module that you take. The types of assessment vary according to the module taken but will include the following: written reports, oral presentations, Q&A sessions, data handling and interpretation, preparation of minutes of meetings, and reflective essays. On occasions your assignment will be directed at a specific audience, namely a client investigator, regulator, or senior manager of your company.

Throughout the year, you will be working on multiple tasks simultaneously. This will include preparing for classes, attendance at classes and working on various assignments which will need to be completed within specified time periods. This means that you will need to manage your time effectively. We strongly advise you to purchase a diary and schedule your teaching times and assessment deadlines into it during induction week, once you have completed registration. This will help you plan and organize your time so that:

i) you attend all your teaching sessions on time, adequately prepared and
ii) you complete and submit all your assignments on time.

The University applies penalties for persistent, unexplained non-attendance and for handing assignments in late. These regulations and procedures will be explained to you as part of the Induction process.

You can read about these regulations in the Taught Student Guidance. This handbook brings together all the information you need to know about the University Rules and Regulations, Assessments as well as sources of academic and pastoral support across campus. You can access this here: http://students.leeds.ac.uk/info/103552/taught_student_policies_and_procedures/969/taught_student_guidance
You should also read through the Partnership Agreement. This Agreement sets out our expectations about the academic responsibilities of the University, staff and students. You can access the Partnership agreement here: http://students.leeds.ac.uk/#The-Partnership

1.8 Requirements for the Degree

Taught postgraduate awards are classified by credit-weighted average grade across all modules studied as part of the programme. To be eligible for the award of an MSc Degree, students must obtain passes in at least 150 credits (including all pass for progression modules) with a minimum of 135 credits at M level, and obtain an average mark of 50% over all modules taken. Students who achieve an average mark of 70 or greater are awarded a Masters Degree “With Distinction”, whilst students gaining an average mark between 60-69 are awarded a Masters Degree “With Merit”. Students who gain an average mark of 50-59 are awarded a Masters Degree. Students who gain less than 150 credits may be awarded a Certificate or Diploma rather than the Masters degree.
SECTION 2

GENERAL INFORMATION

2.1 The Student Education Office

Postgraduate administration in the Faculty is carried out by the Student Education Office, located in the Manton Building, level 7. The Student Education Service Manager (Taught) is Andrew Hollins (tel 0113 34 37486). If you have any general administrative queries, then please direct them to the Student Education Office. The administrator for the Masters programmes, Felicity Jackson, will be able to help with general administration queries (tel 0113 34 37282; email f.m.jackson@leeds.ac.uk).

2.2 Programme Induction

The induction programme starts with the introductory/welcome meeting which is then followed by a module overview meeting. At these meetings we will discuss your module options/route through the programme. Following on from this meeting, you will need to select both semester 1 and 2 module options, have them authorised by staff in the Student Education Office and then proceed to on-line module enrolment (guidelines for on-line module enrolment are included in your introductory information pack). If you wish to change your module selection after module enrolment, then you may be able to do so – depending on how far into the semester we have progressed. Please discuss this with your programme leader. Further induction activities are also arranged during this week and will include: assessment and feedback – postgraduate regulations and procedures, the Virtual Learning Environment introduction/demonstration, good academic practice in referencing and finding, evaluating and storing Information (including practical training on library databases). An outline of the induction programme is included in your information pack.

2.3 Computer Access

You will have access to the University computer clusters located throughout campus. To use the University computing facilities, you will need a username and password. Your University username and password can be retrieved by clicking on the link “get your username and password” on the student portal homepage (http://portal.leeds.ac.uk). You will be able to access your email and Minerva from this account (see section 2.3 on how to retrieve your University username and password if you do not have one).

In case of difficulties, contact the Information Systems Services (ISS) IT help desk located on level 10 Red Route Corridor (ext 33333).

2.3.1 Minerva, Portal & VLE

Minerva can be accessed via https://minerva.leeds.ac.uk/. You will need your University username and password to log in (see section 2.3 on how to retrieve your University username and password if you do not have one).

Through Minerva you will be able to access your email, library account, information about modules, as well as information from around the campus. You will also be able to access and download information about each module from Minerva, such as module handbooks, teaching timetables and assessment deadlines. Learning resources, such as lecture slides, any
handouts and online learning activities will also be located in Minerva. You will be able to access the module areas once you have completed registration. There is also a centralised area for the FBS Masters which contains information regarding Health & Safety, Mitigation, Marking Schemes and Personal Tutorials, again which you will be able to access once you have registered.

You will also be required to submit assessed work electronically into the assignment upload area in the appropriate module in Minerva (see section 2.9.1).

2.3.2 Email and Communications

We will keep you informed of course information such as changes to module timetables via Minerva. We may also use course/module email lists to communicate information about the programme or particular modules. You will be assigned a University email address username@leeds.ac.uk. Your email can be accessed through the university student portal http://portal.leeds.ac.uk. Information about the course will be sent to this address. You must read your email sent to this address and any messages on Minerva regularly.

2.3.3 Social Networking Sites

Social Networking Sites (SNSs), such as Facebook or Myspace, and blogs are becomingly increasingly useful tools. Leeds University Union and some Schools make frequent use of these for communication purposes. Students are, however, requested to use such sites carefully. Neither the University nor LUU would in any way wish to inhibit freedom of expression, but students are reminded that any libellous, defamatory or personally abusive comments about other students or about staff or the posting of images of individuals without their consent could be viewed as bullying/harassment, and could have legal/disciplinary implications. The University will not seek in any way to monitor the use of such sites, but if issues of concern are raised by individuals, it has a duty of care to investigate and take appropriate action. In the first instance, this would typically be a request to remove or amend the relevant text or images. However, if this request does not lead to a resolution, the University reserves the right to take action under the General University Disciplinary Regulations. The individuals concerned might also initiate legal action independently of the University. We are particularly keen that student members of the University do not inadvertently post items that might lead to risk of action. If students have genuine concerns or complaints about their course or any other provision from the University, the most effective route to having these addressed is to use the established procedures including raising the issue with their personal tutor, Head of School or their Student:Staff Forum. Students may also of course use the University Complaints procedure.

2.3.4 Abuse of Faculty/University Computing Services

Before using any computing facilities, please read the regulations relating to computer use in the Taught Students Handbook. Students who transgress these rules are liable to have their user name withdrawn immediately and for a time determined by the University authorities. If this interferes with your ability to complete or submit coursework or to receive messages concerning your course, this is entirely your responsibility and no allowance will be made.

2.4 Updating Personal information, contact details, course choices and academic history

You should check and update the personal information held about you on the University webpage. It is important this is up-to-date if for instance the Student Education Office needs to contact a student in an emergency. You will be able to access your record and make changes to your
personal details by logging on to student services (https://studentservices.leeds.ac.uk). In addition to making changes via student services you must also inform the Student Education Office at the time of change.

### 2.5 Partnership Agreement

The Partnership Agreement is an example of the University’s values in practice as they relate to learning and teaching. It sets out the expectations about the academic responsibilities of the University, staff and students, working together as members of a learning community. It was developed jointly by students, represented by LUU, and the University, represented by the Learning and Teaching Board. The agreement establishes general principles and guidelines which are interpreted by individual Schools and disciplines in ways appropriate to their own context. Students should therefore consider the Agreement alongside more detailed information provided by their parent School. A copy of the Partnership Agreement can be found at: http://students.leeds.ac.uk/#The-Partnership.

### 2.6 Personal Tutor and Personal Tutorial Meetings

You will be assigned a personal tutor for the duration of your study. Your personal tutor will meet with you at least once in semester 1 and at least once in semester 2. The role of your Personal Tutor is to support you in your academic, personal and professional development; to make you aware of the opportunities that are available to you to develop your graduate skills and attributes; and to help you to articulate your various experiences and achievements gained through your academic and co-curricular activities. Your Personal Tutor will also be available to discuss (in confidence) questions regarding university life.

### 2.7 Leeds for Life

The University wants all taught students to get the very best out of the whole experience of coming to Leeds to study. With this in mind, an interactive website, ‘Leeds for Life’ (https://leedsforlife.leeds.ac.uk) provides information and links to resources which will help you to get the best out of your degree and student life.

### 2.8 Attendance

Attendance is compulsory at all teaching sessions including lectures, seminars, tutorials, computing classes, laboratory practicals and field courses. Attendance will be monitored and there are formal consequences for persistent unexplained non-attendance. Persistent unexplained non-attendance will result in you being sent a letter requiring attendance at a review meeting with the Programme Managers and/or Director of Student Education. Failure to attend this meeting will result in the letter being deemed as a first formal warning. Continued non-attendance will result in you being reported to the University Registrar which, in turn, may result in either your exclusion from the module or from the University, depending on the degree of non-attendance.

The Faculty condones absences for good reason e.g. illness, family crisis etc. In these cases you must inform the Student Education Office (also refer to section 2.9.3 and 2.9.4).
2.9 Assessment

Assessment for this programme is entirely through in-course assessment (with some in-class tests). For rules and regulations relating to Assessment, refer to The Taught Student Guide. You will also need to refer to the FBS Code of Practice on Assessment which is available on Minerva.

2.9.1 Submission of Coursework

For modules that are delivered by the Faculty of Biological Sciences – hard copies of assessed coursework must be handed into the Faculty of Biological Sciences Student Education Office, and electronic copies of assessed coursework must be uploaded to Minerva by the deadline stipulated. Submission requirements will depend on the module so please check your module outlines for information.

You must strictly observe deadlines for coursework submission. The standard University penalty for handing in work late is deduction of 5% of the total marks for each day (or part of a day) for which it is delayed. After two weeks you will receive a mark of zero. Assessment deadlines are listed in each module handbook as well as on Minerva.

You must also upload an identical electronic copy of your work into the assignment upload area in the appropriate module in Minerva at the same time (see section 2.3.1).

When submitting assessed work to the Student Education Office, make sure that:

- The handing in coursework pro-forma is completed and attached to your work
- Your student id is written on every page of your work (student names should not be included on the work submitted)
- All completed forms and work is stapled together before submitting

In general where work is submitted electronically it must be word-processed using 1½-line spacing. The font to be used is Arial 11pt. Margins should be 3cm on each side in order that all text is readable when the work is bound and to provide space for comments to be written. All pages must be numbered at the foot of the page. Where requirements for individual pieces of work differ to these guidelines, further details will be provided by your module outline.

2.9.2 Referencing

Referencing means acknowledging the sources used when producing a piece of work. Referencing correctly allows you to demonstrate how widely you have researched the topic, to show the basis of your arguments and conclusions, to acknowledge the work of others – simply referencing, without quotation marks, does not avoid plagiarism.

Referencing Style

For modules in the Faculty of Biological Sciences, students should use the official University of Leeds version of the Harvard referencing style. In some cases there will be specific guidance for particular modules; if this is the case full details will be provided in the module handbook. Guidance on how to include citations within the text and how to reference different types of material is available at http://library.leeds.ac.uk/skills-referencing. Marking of all submitted coursework will be informed by this guidance.

2.9.3 Extensions and Absences
The Programme policy is not to grant extensions but to ask that students submit their work as soon as possible together with any documentary evidence (e.g. medical notes) to support their case for late submission and complete a special circumstances form (a copy of this form is available from the Student Education Office). The work will be marked and any special circumstances will be considered when the special circumstances committee meets. The special circumstances committee will propose their course of action with regard to penalties or consideration of the special circumstances presented by the student. The final decision about the application of penalties will be made by the examination committee. Note: no account can be taken of circumstances that may have affected assessment performance unless supported by documentary evidence (such as a medical note or letter from personal tutor or parents).

*Please note: problems with computers, work lost, damaged disks etc. will not be considered acceptable excuses for late submission of assessed work. In these cases, late penalties will apply. You must therefore make sure that you make backups of all your work at frequent intervals.*

If your absence occurs during assessed coursework and/or handing it in, you must inform the Student Education Office by telephone or email. You should then see the module manager immediately on your return.

If you do not inform us of genuine absences, or do not see module managers immediately on your return, we will assume you are unjustifiably absent and will give you zero marks for the assignment.

### 2.9.4 Mitigating circumstances

When you feel that there are circumstances that may have affected your performance in assessments, but which did not result in your absence from classes, you may complete a special circumstances form (which again must be accompanied with any items of evidence required, such as a medical certificate). These circumstances will be considered by the special circumstances committee and copied to the Exams Committee for consideration.

### 2.9.5 Plagiarism and Cheating

Plagiarism is defined by the University as presenting someone else’s work as your own. Work means any intellectual output and typically includes text, data, images, sound or performance. For more information, see the University’s Guide to Plagiarism: [http://library.leeds.ac.uk/skills-plagiarism/](http://library.leeds.ac.uk/skills-plagiarism/)

The University regards plagiarism, cheating and other instances of academic malpractice with the utmost seriousness. Such cases can be dealt with at School or University level, depending on the nature of the offence, and the penalties imposed can vary from receiving a mark of zero for a piece of work to exclusion from the University.

The Biological Sciences Student Education Office follows the University’s procedures for dealing with cases of suspected plagiarism which are clearly detailed here: [http://www.leeds.ac.uk/secretariat/student_cases.html](http://www.leeds.ac.uk/secretariat/student_cases.html). Procedure will be applied to all forms of assessment whether formative or summative.

**Draft Submissions**

Students are responsible for the submissions they make. If a student claims that a draft was submitted mistakenly, it will nevertheless be treated as the submission. If the submission is found to contain plagiarism, it will attract any penalties for plagiarism as normal. Substitute versions are not permitted.
Fraudulent or Fabricated Coursework
Fraudulent or fabricated coursework is defined as work, particularly reports or laboratory or practical work that is untrue and/or made-up, submitted to satisfy the requirements of a University assessment in whole or in part. Further information is available from the Student Cases Team website: http://www.leeds.ac.uk/secretariat/student_cases.html

Malpractice in University Assessments
Malpractice in University assessments occurs when a candidate attempts to mislead or deceive the examiners concerning the work submitted for assessment. This includes colluding with others (including other students) in the preparation or submission of work. Further information is available from the Student Cases Team website: http://www.leeds.ac.uk/secretariat/student_cases.html

Declaration of Academic Integrity
All students complete a Declaration of Academic Integrity at the beginning of the year. In addition, any work submitted for assessment must be accompanied by a Declaration of Academic Integrity. Work will not be accepted or will not be marked unless this is completed and signed at the time of submission. The declarations confirm that the work is the student's own, and that he or she is aware it is their responsibility to know the definition and importance of plagiarism.

Group assignments
Students are often required to work together (e.g. in practicals) or discuss assignments with other students. However, the coursework you submit for assessment must be your own work and in your own words, not merely a copy or paraphrase of another student's. Some assignments are group authored – check carefully in the relevant module outline.

Electronic surveillance of coursework
We use electronic methods to compare your work with another student's or with published material including the www. You will be required to submit all your written work electronically for these purposes.

2.9.6 Feedback on your work
There are a number of ways in which you will receive feedback on your work. These can be through written comments on your assignments and associated pro-formas, but also orally during scheduled teaching sessions. The latter could be, for example, through discussions with tutors during tutorials, workshops and pre- and post-course work surgeries. It can also be through discussions with your tutors and demonstrators during any practical classes. To benefit fully from the feedback you receive, you should read through the written comments on your assignments/pro-formas and think of actions that you need to take to improve the quality of your work. Similarly, with any oral feedback, you should listen carefully to the advice given, ask questions if necessary and consider ways in which you can use the feedback to improve your work. By engaging fully with the feedback (written and oral) in this way, you are more likely to improve the quality of your work and hence your overall academic performance.

2.10 Student Feedback
In order to ensure that the course responds to the changing needs of the students and that the highest standards of learning and teaching are maintained, we encourage students to give their opinion of the course in a number of ways:

i) Informally via the Programme Leaders, individual lecturer or project supervisor
ii) By means of subject-specific questionnaires completed at the end of modules
iii) Via the Student:Staff Forum

The Student:Staff Forum is a consultative committee, which provides a crucial link between staff and students. It consists of members of staff and students elected soon after the start of the year. The committee meets at least 2 times a year to discuss issues affecting the Course (such as quality of learning and teaching). If there are any problems (or praise) with your course - the content, how it's being taught etc. then let your course representatives on the Forum know. This Forum is your chance to work with staff to get things right so if you'd like to be on this Forum please volunteer. Your comments are valuable and will be considered seriously.

2.11 Student Representatives

The Faculty of Biological Sciences has a vibrant student representative body whose input and feedback is really appreciated by both fellow students and members of staff. Each year a number of students are elected to act as either a School representative or Programme representatives (abbreviated to rep). The representatives meet with academic staff and other staff from the Student Education Office a number of times through the year to feedback the views of their peers on learning and teaching and related student matters. We will be telling you more about the Rep system at Leeds during Induction week. Acting as a Rep will help you build many skills that are valued by prospective employers such as teamworking skills, communication and debating skills, listening skills and problem-solving skills. If you are interested in acting as a Rep please let us know during induction week.

2.12 International Students

The International Student Office provides a range of services to help international students settle in to life in Leeds and to support you during your time here. More information is available here: http://students.leeds.ac.uk/#International-students

For a guide on your first few weeks at Leeds, please click here.

The International Student Office provides a range of services to help international students settle in to life in Leeds, including the following:

- Link to Leeds; contact a current international student
- Meet and Greet service (8th-15th Sept 2017)
- International Welcome (9th-22nd Sept 2017)

The Faculty of Biological Sciences International Community offers support for International Students. Socials are scheduled regularly throughout term time. Further details will be provided via email. If you have any questions regarding the International Community, please contact Susanne Fawcett (tel 0113 3433022 or S.A.Fawcett@leeds.ac.uk).

2.13 Equal Opportunities Policy

The School endorses the University's policy on equality of opportunity. It is our intention to ensure that all students receive equal treatment irrespective of race, gender, disability or sexual orientation. Anyone who wishes to raise any issue related to equality of opportunity should contact the Faculty Diversity Officer, Dr Yoselin Benitez-Alfonso (0113 3432811; y.benitez-alfonso@leeds.ac.uk).
2.14 Students with Disabilities

Under the Special Educational Needs & Disabilities Act (SENDA), the School and University are required to make reasonable provision to enable students with disabilities complete assessed coursework assignments and examinations. Students with disabilities that might affect their performance in assessments must consult the University’s Disabilities Officer at the start of their programme, or as soon as the disability becomes apparent, for the extent of the disability to be assessed professionally. The Disabilities Officer, Dr Martin Stacey (tel 0113 3433145 or m.stacey@leeds.ac.uk) will then discuss with the Faculty appropriate measures for assessed coursework.

2.15 Problems, Advice and Assistance

Various sources of advice are available to you. The first point of contact should be your personal tutor (see section 2.6). In case of administrative queries please ask the Student Education Office. Overseas students can get help with issues that particularly affect them from the International Student Office (Level 11, Marjorie and Arnold Ziff Building, telephone 0113 343 3930). Health problems can be discussed with the Leeds Student Medical Practice, but you are strongly advised to let your programme leader and/or your personal tutor know if health problems are affecting your work. The University runs a Student Counselling Service and the staff are especially trained to help students with personal and emotional problems. It is located at 19 Clarendon Place and is open from 8.30am to 5.00pm on weekdays. The telephone number is 0113 343 4107.

2.16 Security, Fire and Emergencies

Students are asked to help maintain the security of the premises by being sure to close and lock any windows or external doors which they have opened and to check that all external doors and windows are locked if they are the last to leave the room. Please carry your Union card; do not be upset if someone asks to see it for security purposes, and please report any suspicious activity or ‘visitors’ to one of the staff.

If there is a fire, you must know what to do: learn all escape routes from the Faculty Buildings and know where the nominated assembly points are. If the fire alarm sounds as a continuous noise, you must immediately leave the building by the most appropriate route. Do not attempt to use the lifts in the event of a fire. When proceeding to your assembly point, take your bag or briefcase with you. You must not go back into the building (even if the fire alarm stops) until a person in authority (Security Officer or Fire Warden) has stated that it is safe to do so.

All telephones in the Faculty can be used to dial the emergency number, 32222. If a BT telephone has been used to dial 999, Security should also be informed by dialling 32222 so that they can direct the emergency services to the incident.

[Please note - smoking is not permitted in the Faculty Buildings.]
Appendix 1 - Contact Details - Module Managers

For specific teaching queries you can talk to the lecturer in the first instance. If you want to see the module manager, you may contact him/her by e-mail, telephone or arrange a face-to-face visit. Please contact the academic module manager in the first instance for all module related queries.

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<thead>
<tr>
<th>Name</th>
<th>Office</th>
<th>Telephone</th>
<th>E-mail</th>
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<tbody>
<tr>
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<td>Luke Kempton (Industry)</td>
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<td>Matthew McCourt (Industry)</td>
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<td>Michelle Scott (Industry)</td>
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