**University of Huddersfield**

**Programme Specification**

## *This document does not form part of the student contract*

|  |  |  |
| --- | --- | --- |
| **1.** | **Awarding institution** | University of Huddersfield |
| **2.** | **Teaching institution** | University of Huddersfield |
| **3.** | **School and Department** | Applied Sciences  Department of Biological and Geographical Sciences |
| **4.** | **Course accredited by** | Royal Society of Biology (RSB) |
| **5.** | **Mode of Delivery** | Full-time |
| **6.** | **Final Award** | BSc(Hons) |
| **7.** | **Course Title** | Biomedicine/with Supervised Work Experience  Biomedicine with Supervised Research Placement |
| **8.** | **UCAS Code** | C1B2  TBC |
| **9.** | **Subject benchmark statement** | Biosciences (October 2019) |
| **10.** | **Date of Programme Specification Approval** | June 2016 Revalidated January 2019  Revised June 2020 |

**11. Educational Aims of the Courses**

The aims are:

* To develop creativity and innovation.
* To provide a structured, progressive and thematic training in areas of biomedicine which will provide students with a knowledge and understanding appropriate for subject-specific graduate employment.
* To prepare graduates for careers with a wide variety of employers such as pharmaceutical and biotechnological industries, government agencies and hospitals by delivering a curriculum that is relevant to the needs of society.
* To develop key transferable skills to prepare students for more general graduate employment.
* To develop the intellectual and practical skills necessary for progression to postgraduate research and training.
* To encourage academic curiosity which will prepare students for lifelong learning by challenging the students’ attitudes and approaches to learning in order to enable them to fulfil their potential.
* To offer a range of core and some optional modules which allow students to specialise in particular areas of biomedicine
* To offer all students the opportunity to conduct a substantial research project.
* To contribute to the University’s commitment to widening access by recruiting students of different ethnic origins and with a wide variety of educational backgrounds and to accommodate a spectrum of abilities and prior knowledge.
* To operate within a caring and supportive environment in which students can develop confidence in their own abilities.

Major employment areas targeted by this course include:

* bioscience, biotechnology and healthcare industries
* healthcare and diagnostic products
* diagnostic laboratories
* education: university, college and school teaching
* government departments
* government and charity-funded research laboratories and institutes
* patent offices
* regulatory matters in healthcare, including clinical trials.
* research laboratories in universities
* pharma research

**12. Intended Learning Outcomes**

The learning outcomes for this programme have been derived directly from the Quality Assurance Agency Biosciences Benchmark Statement (2019) and map to the module content of the courses in the matrix at the end of the document to guarantee compliance.

**Graduate and Transferable skills**

Intellectual skills

1. analyse, synthesise and summarise information critically from a variety of sources
2. consider issues from a number of perspectives and values and arrive at a considered critical judgement stating assumptions and limitations
3. construct grammatically correct documents in an appropriate academic style and format, using and referencing relevant ideas and evidence
4. understand the importance of academic and research integrity.

Analytical and data interpretation skills

* 1. receive and respond to a variety of sources of information: textual, numerical, verbal, graphical
  2. understand and manipulate numerical data
  3. solve problems by a variety of methods
  4. determine the validity and rigour of statistical outcomes.

Communication, presentation and information technology skills

* + 1. communicate about their subject appropriately to a variety of audiences, including the general public, using a range of formats and approaches and employing appropriate scientific language
    2. cite and reference work in an appropriate manner, ensuring academic integrity and the avoidance of plagiarism whether intentional or not
    3. use the internet and other electronic sources critically as a means of communication and a source of information.

Interpersonal and teamwork skills

* + - 1. identify individual and collective goals and responsibilities and perform in a manner appropriate to these roles, in particular those being developed through practical, laboratory and/or field studies
      2. recognise and respect the views and opinions of other team members
      3. use negotiating skills
      4. evaluate their own performance as an individual and a team member
      5. evaluate the performance of others
      6. develop an appreciation of the interdisciplinary nature of science and of the validity of different points of view.

Personal and professional development skills

* + - * 1. develop the skills necessary for independent lifelong learning (for example working independently, time management, organisational, enterprise and knowledge transfer skills)
        2. identify and work towards targets for personal, academic, professional and career development
        3. develop an adaptable, flexible and effective approach to study and work
        4. build on knowledge and understanding of the role and impact of intellectual property (IP) within a research environment.

**Core biosciences knowledge, understanding and skills**

an interdisciplinary and multidisciplinary approach in advancing knowledge and understanding of the processes and mechanisms of life, from molecular to cellular, and from organism to ecosystem

engagement with the essential facts, major concepts, principles and theories associated with the chosen subject area, including knowledge of the processes and mechanisms that have shaped the natural world in terms, for example, of the spread of time from the geological to the present and of complexity from the environmental to the sub-cellular, including consideration of interactions between living systems and human activities

competence in the core experimental and/or survey skills appropriate to the subject under study

understanding of information and data, and their setting within a theoretical framework, accompanied by critical analysis and assessment to enable understanding of the subject area as a coherent whole

familiarity with the terminology, nomenclature and classification systems, as appropriate

practical and theoretical methods of acquiring, interpreting and analysing biological information with a critical understanding of the appropriate contexts for their use through the study of texts, original papers, reports and data sets

awareness of the contribution of their subject to the development of knowledge about the diversity of life and its evolution

knowledge of a range of communication techniques and methodologies relevant to the particular subject, including data analysis and the use of statistics (where this is appropriate)

engagement with some of the current developments in the biosciences and their applications, and the philosophical and ethical issues involved

awareness of the contribution of biosciences to policy and other debates and controversies

understanding of how biosciences knowledge forms the basis for informed concern about the quality and sustainability of life

awareness of the boundaries and limitations of their learning

awareness of intellectual property (IP) and how scientific advances may be secured and progressed by the application of Intellectual Property Rights (IPRs)

an appreciation of how their skills and learning contribute to the many careers to which graduates will be progressing

an appreciation of the complexity and diversity of life processes through the study of organisms, their molecular, cellular and physiological processes, their genetics and evolution, and the interrelationships between them and their environment

the ability to read and use appropriate literature with a full and critical understanding, while addressing such questions as content, context, aims, objectives, quality of information, and its interpretation and application

the capacity to give a clear and accurate account of a subject, marshal arguments in a sophisticated way and engage in debate and dialogue both with specialists and non-specialists, using appropriate scientific language

critical and analytical skills including a recognition that statements should be tested and that evidence is subject to assessment and critical evaluation

the ability to employ a variety of methods of study in investigating, recording and analysing material

the ability to think independently, set tasks and solve problems.

**Specific graduate skills**

Intellectual skills

recognise and apply subject-specific theories, paradigms, concepts or principles (for example the relationship between genes and proteins, or the nature of essential nutrients in microbes, cells, plants and animals)

analyse, synthesise and summarise information critically, including published research or reports

obtain and integrate several lines of subject-specific evidence to formulate and test hypotheses

apply subject knowledge and understanding to address familiar and unfamiliar problems

recognise the moral and ethical issues of investigations and appreciate the need for ethical standards and professional codes of conduct.

Practical skills

demonstrate competence and progressive development in the basic and core experimental skills appropriate to the programme of study

design, plan, conduct and report on investigations, which may involve primary or secondary data (for example from a survey database)

obtain, record, collate and analyse data using appropriate techniques in the field and/or laboratory, working individually or in a group, as is most appropriate for the subject under study

undertake field and/or laboratory investigations of living systems in a responsible, safe and ethical manner.

**Threshold standard**

On graduating with an honours degree in biosciences in which the study of molecular aspects of biology (including biochemistry) forms a significant proportion, graduates will be able to:

1. know and explain the structure and function of various types of cells in unicellular and multicellular organisms, the structure and function of cell membranes, cell differentiation
2. express relevant biological reactions in chemical terms
3. explain the chemistry and structure of the major biological macromolecules and how that determines their biological properties
4. explain how the principles of genetics underlie much of the basis of molecular biology
5. explain the principles of gene expression and how it is controlled
6. explain a range of appropriate and relevant experimental techniques and how they are used; and be able to perform some of them
7. describe cell metabolism, including the main anabolic and catabolic pathways
8. describe protein structures and functions and their control mechanisms.

**Biomedicine with Research Placement**

In addition to the above, students in the “with Research Placement” course will also have advanced knowledge and skills to carry out independent research projects.

**13. Course Structures and Requirements, Levels, Modules, Credits and Awards**

**13.1** Comprehensive documentation giving module details, course structure and related matters is available online.

The Biomedicine course is studied over three years with an option to extend this by a further year through undertaking a supervised placement in a work-based environment (SSB3001).

The Biomedicine with Research Placement course is studied over three years with an option to extend this by a further year through undertaking a supervised placement in a research-based environment (SSB3003). If students do not take (or do not complete) the optional research-based placement, they will transfer to Biomedicine.

The placement is regarded as especially valuable but it is recognised that it will not be suitable for all students and students can also opt for a full time three-year route. Study is undertaken at three levels, one for each year of University-based study. The course is based on six 20-credit modules per year, with the exception of the Final Year, which includes the 40-credit Research Project.

All assessments, including examinations, are set and marked by academic staff of the University. Assessment results are considered by the Biological Sciences Course Assessment Board (CAB), which includes the staff responsible for delivering the modules and the External Examiners. The Board determines degree classification based on a student’s best 100 credits of performance in Year Two and the Final Year, with the latter weighted by a factor of two.

**13.2 Course Structure**

The Biomedicine course may include a work-based supervised placement year, between Year Two and the Final Year (SSB3001).

The Biomedicine with Research Placement includes a supervised research-based placement year (SSB3003). Stipulations on the nature of the placement and pre-requisites are described in the SSB3003 module specification document.

All of the modules are Core modules unless listed under ‘Option’ in the Course structure shown below.  SFB1010 (Research Skills), SFB1004 (Biochemistry 1), SIB2001 (Research Skills 2) and SHB4001 (Research Project) are compulsory modules.

Compulsory modules cannot be awarded a condoned pass and so must be passed with a score over 40%. See Regulations of Awards for details of progression rules:

<https://www.hud.ac.uk/registry/regulations-and-policies/awards/>

**Year 1 Full Time - Foundation Level**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Level** | **Module Code** | **Module Title** | **Credits** | **Module Type** |
| F (FHEQ 4) | SFB1010 | Research Skills | 20 | Compulsory |
| F (FHEQ 4) | SFB1003 | Molecular & Cellular Biology | 20 | Core |
| F (FHEQ 4) | SFB1004 | Biochemistry 1 | 20 | Compulsory |
| F (FHEQ 4) | SFB1006 | Physiology 1 | 20 | Core |
| F (FHEQ 4) | SFB1011 | Medical Pharmacology 1 | 20 | Core |
| F (FHEQ 4) | SFB1008 | World of Microbes | 20 | Core |

**Year 2 Full Time - Intermediate Level**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Level** | **Module Code** | **Module Title** | **Credits** | **Module Type** |
| I (FHEQ 5) | SIB2001 | Research Skills 2 | 20 | Compulsory |
| I (FHEQ 5) | SIB2003 | Molecular Biology | 20 | Core |
| I (FHEQ 5) | SIB2002 | Cell Biology | 20 | Core |
| I (FHEQ 5) | SIB2006 | Physiology 2 | 20 | Core |
| I (FHEQ 5) | SIB2015 | Infectious Diseases and Therapeutics | 20 | Core |
|  | **Option (x1)** |  |  |  |
| I (FHEQ 5)  I (FHEQ 5) | SIB2012  ***Or***  SIB2004  ***Or***  SIB2016 | Molecular Aspects of drug action  Biochemistry 2  Epidemiology and Public Health | 20  20  20 | Optional  Optional  Optional |

**Year 3 Work or Research Placement**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Level** | **Module Code** | **Module Title** | **Credits** | **Module Type** |
| I (FHEQ 5) | SSB3001 | Optional Supervised Work Experience | 120 | Optional |
| I (FHEQ 5) | SSB3003 | Optional Supervised Research Experience | 120 | Optional |

**Final Year**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Level** | **Module Code** | **Module Title** | **Credits** | **Module Type** |
| H (FHEQ 6) | SHB4001 | Research Project | 40 | Compulsory |
| H (FHEQ 6) | SHB4019 | Mechanisms and Pathology of Chronic Disease | 20 | Core |
| H (FHEQ 6) | SHB4007 | Medical Genetics | 20 | Core |
| H (FHEQ 6) | SHB4012 | Immunology and Infection | 20 | Core |
| H (FHEQ 6) | **Option** (x1) | | | |
| H (FHEQ 6)  H (FHEQ 6) | SHB4006  ***Or***  SHB4003 | Advanced Physiology  Applied Molecular Genetics | 20  20 | Optional  Optional |

**13.3** **Interim Awards**

Students who are unable, or do not wish, to complete the Honours programme are able to gain named intermediate awards determined by the number and type of credits as follows:

**Certificate of Higher Education**  120 “F” credits

**Diploma of Higher Education** 120 “F” credits + 120 “I” credits

**BSc Biomedicine** 120 “F” credits + 180 “I”/”H” credits (at least 60 “H” credits)

At the discretion of the CAB a named ordinary degree may be awarded as an alternative to BSc Biomedicine, providing an appropriate combination of ‘H’ level modules have been passed.

**14. Teaching, Learning and Assessment**

The course ensures that the intended learning outcomes can be achieved by:

1. providing a coherent education with a high degree of currency in the chosen specialism
2. delivering a curriculum informed by research and scholarly activity
3. delivering a curriculum informed by feedback from employers
4. providing a curriculum delivered by staff who engage in peer observation of teaching and participate in an annual personal development review
5. including modules on specialist topics relevant to the field
6. having a flexible structure, which caters for a diversity of abilities
7. providing experience of carrying out a wide range of laboratory procedures using modern equipment
8. incorporating modules with a variety of types of teaching, learning and assessment
9. providing modules that encourage students to think and work independently, culminating in a research project in the final year
10. providing assessments that encourage students to work in teams
11. ensuring the availability of support and guidance throughout the students’ education by allocating a personal tutor to each of them
12. providing students with comprehensive feedback on their progress throughout their course
13. developing progressively the students’ personal skills
14. providing at all stages of the course a structured and supported process that enables students to reflect upon their learning, performance and achievement, and to plan their personal, educational and career development
15. offering the opportunity of a year’s work placement
16. making available expert careers guidance

**15. Support for Students and their Learning**

**15.1** Support for students undertaking the courses operates at University, School and Course level as follows:

**15.2 University Level**

Central to the provision of student support are **Student Services**. The range of services they offer include:

## 15.2.2 Wellbeing and Disability Services

* [Counselling](http://www.hud.ac.uk/wellbeing/studentcounselling/)
* [Back on Track](http://www.hud.ac.uk/wellbeing/back-on-track/)
* [Disability Services](http://www.hud.ac.uk/disability-services/)
* [Drop in (Counselling and Wellbeing)](http://www.hud.ac.uk/wellbeing/)
* [The Faith Centre](http://www.hud.ac.uk/faith-centre/)
* [Getting help](http://www.hud.ac.uk/wellbeing/needhelpwithaproblem/)
* [Group workshops and courses](http://www.hud.ac.uk/wellbeing/needhelpwithaproblem/groupworkshops/)
* [Hate Crime Reporting Centre](http://www.hud.ac.uk/wellbeing/hatecrimereporting/)
* Help for suspended students
* [Self help](http://www.hud.ac.uk/wellbeing/needhelpwithaproblem/selfhelp/)
* [Student parents](http://www.hud.ac.uk/wellbeing/studentparents/)
* [Student wellbeing](http://www.hud.ac.uk/wellbeing/)
* [Welfare support](http://www.hud.ac.uk/wellbeing/needhelpwithaproblem/studentwelfare/)
* [University Health Centre](http://www.universityhealthhuddersfield.co.uk/)
* Big White Wall

More information on the range of student services can be found on their website at: <http://students.hud.ac.uk/wellbeing-disability-services/disabilityservices>

**15.2.3 Careers and Employability Service**

[Careers and Employability Service](https://students.hud.ac.uk/opportunities/careers/) including Jobshop

An integral part of the students Personal development and careers support is provided by the University’s Global Professional Award (GPA). This CMI accredited course runs alongside the academic modules and integrates aspects of well-being, career planning and global awareness.

**15.2.4 The Student Finance Office** provides:

* Information and guidance regarding possible sources of funding for all courses in the University.
* Budgeting advice to discuss a variety of options and strategies in order to manage on a budget.
* Facilities for the billing and payment of income to be collected by the University.
* Debt advice via personal and confidential sessions is available from trained staff along with mediation and resolution.
* Further information can be found on their website at: <http://www.hud.ac.uk/students/finance>

**15.2.5** **Computing services** provide induction and ongoing support for all students. More information on the range of computing services can be found on their website at:

<http://students.hud.ac.uk/it/>

**15.2.6 Library** **Services** provide induction and ongoing support for all students. More information on the range of library services can be found on their website at: <http://www.hud.ac.uk/library/>

**15.2.7** [**Students’ Union**](https://www.huddersfield.su/)

**15.2.8** [**International Office**](https://www.hud.ac.uk/international/)provides help and support for all overseas students

**15.2.9** [**Accommodation**](https://www.hud.ac.uk/uni-life/accommodation/)

**15.2.10** [**Sports facilities**](https://sport.hud.ac.uk/)

**15.3 School Level**

The School of Applied Sciences provides additional student support using a variety of approaches:

* + 1. **Induction Week**
    2. **Personal Academic Tutor (PAT)** assigned to each student who maintains regular contact with the student throughout each academic session, especially at key times of the year for Personal Development Planning (PDP)
    3. **PDP** meetings
    4. **Support and Guidance Officers** work with the University Student Support systems to provide pastoral support as required.
    5. **School Student Support Office** (Room JPGS/25) for course enquiries.
    6. **Academic Skills tutors** can give one to one support to students requiring help with study skills.

**15.3.7** Student attendance is monitored in accordance with the University regulations.

**15.4 Course Level**

At course level support is provided by:

15.4.1 Flying Start is a key part of all Biology courses. This is a short and intensive induction programme of lectures, laboratory practicals, problem solving sessions, group work and social activities with several objectives and aims: to build the student community by building social cohesion within the cohort and by meeting with all members of staff within the Department; to familiarize the students with good laboratory practice, local H&S procedures and build responsibility within the cohort; to demonstrate learning strategy and build clear expectations of rigour and self-discipline amongst the cohort particularly with respect to independent study, library use and problem solving individually and in set groups. The programme also covers key elements of biodiversity and the concept of evolution by natural selection through a tutorial and problem solving session involving small group work, library research and then feedback from the groups on a specific problem in biodiversity and evolution.

* + 1. Students will be supported through academic mentoring
    2. Module Tutors are available to help with module-specific academic problems.
    3. Supporting documentation is provided online in the form of Course Handbooks, Module Handbooks, and Programme and Module specifications.
    4. [Brightspace](https://brightspace.hud.ac.uk/d2l/login) virtual learning environment.
    5. Specialised computing laboratories and science laboratories

**15.4.7** Student e-mail and access to teaching staff including the Head of Department and the Course Leader.

**16. Criteria for Admission**

**16.1** The University of Huddersfield seeks and encourages applicants in order to widen participation, improve access and apply the principles of equal opportunities. We provide support for applicants who require additional assistance in order to select the right course of study and make a successful transition to studying at University. We encourage local, national and international applications. Further information for International Students can be found on: <http://www.hud.ac.uk/international>

If you were educated outside the UK, you are required to have International English Language Testing System (IELTS) at a score of 6.0 with a minimum score of 6.0 in writing and a minimum of 5.5 in any single component. If you have alternative qualifications or do not meet the IELTS requirement we also offer a range of [Pre-Sessional English Programmes.](http://www.hud.ac.uk/international/pre-sessionalenglishprogramme/)

**16.2** The University provides opportunities for the accreditation of prior learning (APL) as stated at the following link: <https://www.hud.ac.uk/policies/registry/awards-taught/section-c/>

**16.3** The University’s general minimum entry requirements are specified in Section D of the Regulations for Awardswhich can be found on the University website as follows: <https://www.hud.ac.uk/policies/registry/awards-taught/section-d/>

**16.4** Every person who applies for this course and meets the minimum entry requirement – regardless of any disability – will be given the same opportunity in the selection process. General advice and information regarding disability and the support the University can give can be found by contacting student services as follows:

Telephone**:** 01484 472675

Email: [disability@hud.ac.uk](mailto:disability@hud.ac.uk)

Further information is available at their website at:

<http://students.hud.ac.uk/wellbeing-disability-services/disabilityservices>

Further advice on the specific skills and abilities needed to successfully undertake this course can be found by visiting the University website at <http://www.hud.ac.uk/courses/> and by contacting the admissions tutor.

**16.5** Entry requirements for this course are normally one of the following:

* BBC at A Level including a grade B in a relevant Science subject. The endorsement for practical work is an essential part of Science A-Level study, and is a requirement for entry to our degree course.
* DMM in BTEC Level 3 Extended Diploma in Applied Science. Alternatively, a BTEC Level 3 Extended Diploma in Health and Social Care is acceptable but must be accompanied by another Science A-Level at grade C or above.
* 112 UCAS tariff points from International Baccalaureate qualifications which should include modules in a relevant Science subject.
* Access to Higher Education Diploma with 45 Level 3 credits at Merit or above to include modules in relevant science subjects
* Successful completion of the University of Huddersfield Science Extended degree course
* Applications are also welcomed from mature candidates capable of benefiting from the course

Full details of entry requirements are given in the University prospectus and on the website.

**17. Methods for Evaluating and Improving the Quality and Standards of Teaching and Learning**

**17.1 University:** The methods for the validation and annual evaluation of courses, including those validated by external bodies, and for the review of teaching and research and of academic support services are specified in the University’s; Quality Assurance Procedures for Taught Courses and Research Awards which can be found on the University website as follows:

<https://www.hud.ac.uk/policies/registry/qa-procedures/>

**17.1.1 Periodic reviews**

**17.1.2 External examiner system**

**17.1.3 University Teaching and Learning Committee**

**17.1.4 Mechanisms for student feedback** (including independent student satisfaction survey)

**17.1.5 Institutional staff development courses**

**17.2** **School**

**17.2.1** Mechanisms for review and evaluation of teaching, learning, assessment, the curriculum and outcome standards:

* Course and module reviews (student evaluations and staff report)
* Annual course evaluation report prepared by the Course Leader and considered by Course Committee and School Annual Evaluation Committee
* Peer observation of teaching
* External Examiners' reports
* PSRB requirements

**17.2.2 Committees with responsibility for monitoring and evaluating quality and standards**

* Student Panel
* Course Committee
* School of Applied Sciences Teaching and Learning Committee
* School of Applied Sciences Annual Evaluation Committee
* Course Assessment Board
* Annual Evaluation Committee - All forms of feedback, including a review of progression and completion rates are included in the annual course monitoring report. This is considered through the process of annual evaluation of courses and enables areas of weakness to be identified and clear action plans to be determined and monitored. The School has introduced a rigorous module review process that is undertaken by Year Tutors prior to annual evaluation to ensure necessary changes to modules can be implemented immediately. In addition to the annual monitoring processes the University organises a quinquennial review at school level.

**17.2.3 Mechanisms for gaining student feedback on the quality of teaching and their learning experience**

Student Feedback is an integral part of course evaluation and improvement. Students provide feedback through a variety of means including:

* Module and course evaluation questionnaires
* Student representation on Course Committee
* Student Panel.

**17.2.4 Employer Feedback** is sought through feedback questionnaires involving employers of our graduates and through monitoring from placement providers.

* + 1. **External Examiners** provide evaluation of the standards achieved by the students. The course team is required to formally respond to comments raised by External Examiners and to report on progress made in addressing any areas on concern.

**17.2.6 Staff development priorities include:**

* Staff Personal Development Review
* Updating professional developments
* Regular course meetings and annual review and planning for subsequent academic year.

**18. Regulation of Assessment**

**18.1** University awards are regulated by the Regulations for Awards on the University website as follows: <https://www.hud.ac.uk/policies/registry/awards-taught/> and the Regulations for Taught Students, procedures and forms can be accessed on the University website as follows:

<https://www.hud.ac.uk/registry/current-students/taughtstudents/>

The minimum pass mark for each module is 40%.

An overview of assessment details and procedures is provided in the Course Handbook.

To qualify for the award of Honours students must be credited with 360 credits and complete all the requirements of the course. Only the marks from the second and third year will contribute to the final classification of degree.

The marks for each module are weighted according to the credit rating. Third year marks contribute two thirds of the overall performance.

**18.2 Role of External Examiners**

External Examiners are appointed by the University Learning and Teaching Committee. The role of the External Examiner is that of moderator. In order to do this they:

* approve examination papers
* review coursework and examination scripts
* interview borderline candidates for award
* attend the Course Assessment Board.

**19. Indicators of Quality and Standards**

* Reports of validation panels
* Periodic Review
* Subject Review
* Annual course review
* External examiners’ reports
* Qualifications and experience of staff
* Recognition of BSc(Hons) suite of courses by RSB for accredited status

# 

# Appendix 1

# Mapping of learning outcomes to modules

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Benchmark** | SFB1010 | SFB1003 | SFB1004 | SFB1006 | SFB1008 | SFB1011 |  | SIB2001 | SIB2002 | SIB2003 | SIB2004 | SIB2006 | SIB2012 | SIB2016 | SIB2015 |  | SHB4001 | SHB4003 | SHB4006 | SHB4007 | SHB4012 | SHB4019 |
| 1 | X |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| 2 | X |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X |  |  | X |  |  |
| 3 | X |  | X |  |  |  |  | X |  |  |  |  |  |  |  |  | X | X |  | X | X |  |
| 4 | X |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| 5 | X |  | X |  |  |  |  | X |  |  |  |  |  |  |  |  | X |  | X |  |  |  |
| 6 |  | X | X | X |  |  |  | X | X | X | X |  | X |  | X |  |  |  | X |  |  |  |
| 7 | X | X | X | X | X | X |  |  | X | X | X | X | X | X | X |  |  | X | X | X |  |  |
| 8 | X |  |  |  |  |  |  | X |  |  |  | X |  |  |  |  | X |  | X |  |  |  |
| 9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| 10 | X |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| 11 | X | X | X | X | X | X |  | X | X | X | X | X | X | X | X |  | X | X | X | X | X |  |
| 12 | X |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| 13 | X |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| 14 |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| 15 |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| 16 |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| 17 | X |  | X |  |  |  |  | X |  |  | X |  |  |  |  |  | X |  |  | X |  |  |
| 18 | X |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| 19 | X |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| 20 | X |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| 21 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| 22 | X | X | X |  |  |  |  | X | X | X | X |  |  |  |  |  | X |  | X |  | X |  |
| 23 |  | X | X |  | X |  |  |  |  |  | X |  |  |  |  |  |  | X | X |  | X |  |
| 24 |  | X | X | X | X | X |  |  | X | X | X | X | X | X | X |  |  |  | X |  |  |  |
| 25 | X |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X | X |  |  |  |  |
| 26 |  | X | X | X | X | X |  |  | X | X | X | X | X |  |  |  |  | X |  | X | X |  |
| 27 | X |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| 28 |  | X | X |  |  |  |  |  | X | X | X |  |  |  |  |  |  | X |  |  |  |  |
| 29 | X |  |  |  |  |  |  | X |  |  |  | X |  |  |  |  | X |  | X |  |  |  |
| 30 | X |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X | X |  | X |  |  |
| **Benchmark** | SFB1010 | SFB1003 | SFB1004 | SFB1006 | SFB1008 | SFC1002 |  | SIB2001 | SIB2002 | SIB2003 | SIB2004 | SIB2006 | SIB2012 | SIB2016 | SIC2004 |  | SHB4001 | SHB4003 | SHB4006 | SHB4007 | SHB4012 | SHB4019 |
| 31 | X |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X |  |  | X |  |  |
| 32 | X |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| 33 | X |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| 34 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| 35 | X |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| 36 | X | X | X |  | X |  |  | X | X | X | X |  |  |  |  |  | X |  |  | X | X |  |
| 37 | X |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| 38 | X |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| 39 | X |  | X |  |  |  |  | X |  |  |  | X |  |  |  |  | X |  | X | X |  |  |
| 40 | X | X | X | X |  |  |  | X | X | X | X |  | X |  |  |  | X |  |  |  | X |  |
| 41 | X |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| 42 | X | X | X | X | X | X |  | X | X | X | X | X | X | X | X |  | X | X | X | X | X |  |
| 43 | X |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X | X | X | X | X |  |
| 44 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| 45 | X |  | X |  |  |  |  | X |  |  | X |  |  |  |  |  | X |  |  |  |  |  |
| 46 |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| 47 |  | X | X | X | X | X |  |  | X | X | X | X | X | X | X |  | X |  | X |  |  |  |
| 48 | X |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| 49 |  | X | X | X | X | X |  |  | X | X | X | X | X |  | X |  | X |  | X |  |  |  |
| 50 |  | X |  |  |  |  |  |  | X | X |  |  |  |  |  |  | X |  |  |  |  |  |
| 51 |  | X | X |  |  |  |  |  | X |  | X |  |  |  |  |  |  |  |  |  |  |  |
| 52 |  |  | X |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  |  |  |  |
| 53 |  | X | X |  |  |  |  |  |  | X | X |  |  |  |  |  |  |  |  |  |  |  |
| 54 |  | X | X |  |  |  |  |  |  | X | X |  |  |  |  |  |  | X |  | X | X |  |
| 55 |  | X |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  | X |  | X |  |  |
| 56 |  | X | X | X | X | X |  |  | X | X | X | X | X |  | X |  |  | X | X | X | X |  |
| 57 |  |  | X |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  |  |  |  |
| 58 |  |  | X |  |  |  |  |  |  | X | X |  |  |  |  |  |  |  |  |  |  |  |

Benchmarking falls in to three categories in the QAA Subject Benchmark statement for Biosciences (November 2015) under sections (4) Graduate and key transferable skills, (5) Core biosciences knowledge, understanding and skills and Benchmarking standards (7). In total there are 58 points summarized here with a more simple numbering system (used above) but otherwise verbatim from the original statement.

**Appendix 2**

**Course Assessment Board Structure**

|  |  |  |  |
| --- | --- | --- | --- |
| Mode of Study | Course Start Month | Length before Main CAB | Expected Month for Main CAB |
| UGT FT | September | 9 months | June |

Appendix 1 - Assessment schedule, for all modules including optional modules, identifying the final assessment submission point for the course overall

|  |  |  |
| --- | --- | --- |
| **Module** | **Exam** | **Practical or Coursework** |
| SFB1003 | 60% | 40% |
| SFB1004 | 60% | 40% |
| SFB1006 | 60% | 40% |
| SFB1008 | 60% | 40% |
| SFB1010 | None | 60% Mathematics and Statistics  30% Report  10% Oral Presentation |
| SFB1011 | 60% | 40% |
|  |  |  |
| SIB2001 | none | 50% Group Work  35% Case Study  7.5% COSHH  7.5% Ethics |
| SIB2002 | 60% | 40% |
| SIB2003 | 60% | 40% |
| SIB2006 | 60% | 40% |
| SIB2015 | 60% | 40% |
| SIB2004 (optional) | 60% | 40% |
| SIB2012 (optional) | 60% | 40% |
| SIB2016 (optional) | 60% | 40% (Group Presentation) |
|  |  |  |
| SHB4001 | none | 75% Written Report  15% Oral Presentation  10% Supervisor Assessment |
| SHB4007 | 70% | 30% |
| SHB4012 | 70% | 30% (Poster and Interview) |
| SHB4019 | 70% | 30% (Flyer and Group Presentation) |
| SHB4003 (option) | 70% | 30% |
| SHB4006 (option) | 70% | 30% |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Appendix 3 - PDP mapping

|  |  |  |
| --- | --- | --- |
| **Aspect of PDP** | **Place in the course** | **Evidence** |
| Personal reflection and CV development. | Years 1/2/3 - Personal tutorials.  (SFPT001, SIPT001, SHPT001) | CV  List of Technical Skills (checklist) |
| Personal reflection | Optional SWE/SRE year | Placement log |
| Developing Presentation Skills | SFB1010 (formative and summative individual presentations)  SIB2001 (summative group presentation)  SHB4001 (summative individual presentation) | Feedback on presentations |
| Teamwork | SIB2001 | Learning Outcome -The students will be able to develop their team working skills in diverse teams, appreciate the advantages and difficulties of team-work whilst negotiating with their peers. |
| Various aspects of PDP | Global Professional Award |  |
| Developing Independence/ confidence | SHB4001 | Students reflect upon their personal development, write about their weaknesses, make plans for improvement and identify key skills. There is a particular emphasis on career plans with tutorials on employment and postgraduate study, as well as interview techniques. |

Appendix 4 - [Subject benchmark/s](https://www.qaa.ac.uk/quality-code/subject-benchmark-statements) to course learning outcomes mapping (please use the [QAA Qualifications Descriptor](https://www.qaa.ac.uk/quality-code/qualifications-and-credit-frameworks) where there is no available subject benchmark)