

# PROGRAMME SPECIFICATION

Name, title and level of final qualification(s)	Cert HE Life Sciences for Subjects allied to Medicine			
	(Level 4)			
Name and title of any exit qualification(s)	Cert CE			
Awarding Body	University of London			
Teaching Institution(s)	Birkbeck, University of London			
Home School/other teaching departments	School of Natural Sciences			
Location of delivery	Central London			
Language of delivery and assessment	English			
Mode of study, length of study and normal start month	Full-time (1 year) Part-time (2 years) September/January (1 year route only)			
Professional, statutory or regulatory body	N/A			
QAA subject benchmark group(s) Higher Education Credit Framework for England	N/A			
Birkbeck Course Code	UCHLIFSC_C (1 year, October start) UCHLIFS2_C (2 years, October start) UCHLIFSJ_C (1 year, January start)			
HECoS Code	100346 100417			
Start date of programme	Autumn 2010			
Date of programme approval	Spring 2010			
Date of last programme amendment approval	November 2022			
Valid for academic entry year	2023-24			
Programme Director	Dr Paul King			
Date of last revision to document	01/11/2022			

# **Admissions requirements**

We welcome applicants without traditional entry qualifications as we base decisions on our own assessment of qualifications, knowledge and previous work experience. We may waive formal entry requirements based on judgement of academic potential.

Given the very diverse background of students entering the programme, there are no formal entrance requirements.

Applicants are advised that this intensive programme requires a high level of commitment and that although there are no formal qualifications required for admission they need to have a keen interest in science and sufficient time to devote to their studies

All applicants for this programme first have to complete short self-assessment exercises at home in biology, chemistry and numeracy and then attend for interview with members of the lecturing team or the programme director. The completed diagnostic material provides a good idea of students' skills in relation to the starting level of each module and assists students and lecturers in deciding which modules meet applicants' interest and potential, and whether they should study the programme over one or two years.

Those offered places may be required to attend one of the summer top-up courses or be set pre-coursework to revise and improve their numerical and/or science skills before the start of the modules in September.

#### Course aims

- To widen and encourage participation of mature learners in science;
- To promote equal opportunities to higher education for non-traditional learners needing to study in the evening;
- To provide a sound framework and body of knowledge for understanding the ideas and methodology of the life sciences;
- To provide laboratory work which aids understanding of underlying scientific concepts and encourages the solution of practical problems;
- To develop laboratory skills and safe practice;
- To provide an enjoyable and stimulating learning experience;
- To encourage and support the development of self-confidence and independence in the learning of science;
- To provide a programme of study that will enable successful students to progress to more advanced programmes of study in life sciences and subjects allied to medicine;

## **Programme Rationale:**

The programme was developed in order to:

- Enable progression to a wide range of further study in science both at Birkbeck and at other HEIs. The department of Biological Sciences at Birkbeck encourages progression of students from this award, and where learners' aspirations are to disciplines not within the College's portfolio, particularly within medicine and related fields, progression is offered by many of the other Colleges of the University and other HEIs.
- Provide a firm foundation which relates to the subject benchmarks for the Biosciences and Chemistry to ensure not only progression but which will sustain success of learners within the next phase of their studies.
- Meet the needs of adult learners who wish to study Life Sciences via a part-time mode of study.
- Provide a stopping—off point for those participants who wish to widen their knowledge and understanding of science without immediate progression to further study beyond the Cert HE.

- Contribute to the national endeavour to widen participation in science e.g. in line with the SET and STEM agendas by increasing the number of students able to progress to science based disciplines; to raise the profile of science and to encourage participation by nontraditional groups e.g. in line with the WISE agenda.
- Meet Birkbeck's mission to provide access to science to a wide audience and in-line with principles of Equal Opportunities.
- Include 2 modules, one focussing on study and research skills, and one on personal progress and development planning, to be in-line with Birkbeck's mission and policies on the development of general skills such as communication, IT, team working, and career management.

The programme may be undertaken over a single academic year in full-time mode or by part-time study over two academic years. Subject-specific modules will provide a sound foundation in basic chemistry as well as in cellular and molecular biology. Thus successful completion will provide you with the knowledge and skills needed to progress to degrees in the life sciences and subjects allied to medicine. The programme also includes modules that will focus on your overall personal and academic development, and which will assist you in planning your applications for further study.

## **Course structure**

Level	Module Code	Module Title	Cre dit	Comp Core/ Option	Likely teaching term(s)			
Full-time – 1 year, October start								
4	FFSC011H4	Biology: Part 1 of 3	15	Core	T1			
4	FFSC021H4	Biology: Part 2 of 3	15	Core	T2			
4	FFSC031H4	Biology: Part 3 of 3	15	Core	T3			
4	FFSC012H4	Chemistry: Part 1 of 3	15	Core	T1			
4	FFSC022H4	Chemistry: Part 2 of 3	15	Core	T2			
4	FFSC032H4	Chemistry: Part 3 of 3	15	Core	T3			
4	SCBS041H4	Personal Progress and Development Planning	15	Core	T1-3			
4	FFSC200H4	Study and Research Skills for Life Sciences	15	Core	T1-3			
Part-t	Part-time – 2 years, October start							
Year 1								
4	FFSC011H4	Biology: Part 1 of 3	15	Core	T1			
4	FFSC021H4	Biology: Part 2 of 3	15	Core	T2			
4	FFSC031H4	Biology: Part 3 of 3	15	Core	T3			
4	FFSC200H4	Study and Research Skills for Life Sciences	15	Core	T1-3			
Year 2								
4	FFSC012H4	Chemistry: Part 1 of 3	15	Core	T1			
4	FFSC022H4	Chemistry: Part 2 of 3	15	Core	T2			
4	FFSC032H4	Chemistry: Part 3 of 3	15	Core	T3			
4	SCBS041H4	Personal Progress and Development Planning	15	Core	T1-3			

# Full-time – 1 years, January start

The January-start variant of the Cert HE runs over three academic terms and is built from the same modules studied in the October-start version. Terms one and two (Spring and Summer) fall within the same academic year, with term three commencing in Autumn of the following academic year. The programme therefore finishes in December.

Spring Term								
4	FFSC011H4	Biology: Part 1 of 3	15	Core	T1			
4	FFSC012H4	Chemistry: Part 1 of 3	15	Core	T1			
Summer Term								
4	FFSC021H4	Biology: Part 2 of 3	15	Core	T2			
4	FFSC022H4	Chemistry: Part 2 of 3	15	Core	T2			
Autumn Term								
4	FFSC031H4	Biology: Part 3 of 3	15	Core	T3			
4	FFSC032H4	Chemistry: Part 3 of 3	15	Core	T3			
Modules below are taught across 3 academic terms								
4	FFSC200H4	Study and Research Skills for Life Sciences	15	Core	T1-3			
4	SCBS041H4	Personal Progress and Development Planning	15	Core	T1-3			

Core: Module must be taken and passed by student

Compulsory: Module must be taken but can be considered for compensated credit (see

CAS regulations paragraph 24)

Option: Student can choose to take this module

## How you will learn

Your learning and teaching is organised to help you meet the learning outcomes (below) of the course. As a student, we expect you to be an active learner and to take responsibility for your learning, engaging with all of the material and sessions arranged for you.

Each course is divided into modules. You will find information on the virtual learning site (Moodle, see Academic Support below) about each of your modules, what to expect, the work you need to prepare, links to reading lists, information about how and when you will be assessed.

Your learning for this course will be organised around the activities outlined below.

A wide range of teaching methods including lectures, laboratory experiments and demonstrations, problem-solving, group work and presentations are used.

On-line learning materials (module and programme guides, lecture overheads and handouts, assessments and past papers, other relevant materials and links) are provided on Moodle.

All modules emphasise the development of active and scholarly engagement with the curriculum. The module Study and Research Skills for Life Sciences supports students in the acquisition of independent study skills including skills for revision and examination preparation. The module Personal progress and Development Planning assists students with their application for further study and career planning.

Diagnostic exercises set in the first two weeks of the Autumn Term enable students to identify gaps in their skills and on-line material is provided to assist them in the practice and

enhancement of skills in identified areas. Booster sessions provide additional face-to-face assistance, as do the peer support sessions run by former students.

Home study is encouraged by referenced weekly reading and text book problems, question sheets, and by a programme of home assignments.

# How we will assess you

The course will use a variety of assessment methods. Assessment is used to enhance your learning rather than simply to test it. For most of the modules associated with this course, your assessment will be through the following types of assessment.

Assessment in the first two modules of Biology and Chemistry is entirely though a range of different types of coursework, including:

- Theory (home) assignments;
- On-line (short) quizzes;
- On-line assignments;
- Practical assignments (assessment of report either written in class or at home);
- End-of-module in-class tests (unseen).

The unseen in-class end-of-module tests provide formative examination practice for the final examination at the end of Module 3. Students are strongly encouraged to attempt all of the assessments and the overall mark for each of the Part 1 & 2 modules is calculated from a suitable weighted average of all the elements of assessment. Obliging students to take the end-of-module test for these modules allows students to treat these as formative assessments in line with QAA guidance of avoiding premature summative assessment and the provision of sufficient time for students to mature and synthesise the knowledge.

The final module (Part 3) for each subject is assessed by a final unseen 3 hour examination, which contributes 80% of the final mark for the module. The remaining 20% is calculated from a coursework assignment. Both, the examination and the coursework element must be passed in order to gain an overall pass for each Part 3 science module.

Personal Progress and Development Planning is assessed as Pass/Fail only and involves coursework assignments such as an online application and personal statement for further study or employment and an essay/report based on career research.

Study and Research Skills for Life Sciences is assessed as Pass/Fail only and involves putting together a skills portfolio exhibiting a range of necessary science-based skills and a critical review of web-sites and background texts.

The assessment strategy is designed to support the students' development with a balance of coursework, in-class tests and examination changing as the programme progresses. The final examinations for the Part 3 science subject modules are double-marked, and all coursework and tests are subject to sampling and moderation.

The minimum pass mark for each module is 40%, and students must pass all eight modules to be awarded the Certificate of Higher Education. Students may apply for re-assessment in modules they failed at the next possible opportunity, which is usually in the August of that year or the subsequent academic year.

# Learning outcomes (what you can expect to achieve)

'Learning outcomes' indicate what you should be able to know or do at the end of your course. Providing them helps you to understand what your teachers will expect and also the learning requirements upon which you will be assessed.

At the end of this course, you should be able to:

# Subject specific

- 1. Demonstrate knowledge of the underlying concepts and principles associated with the life sciences and be able to evaluate and interpret these within the context of their studies;
- 2. Apply chemical and biological concepts to a diverse range of issues and to the solution of problems;
- 3. Analyse and interpret data collected personally in the laboratory or provided in exercises;

#### Intellectual

- 4. Extract, evaluate and accurately document relevant information from scientific sources;
- 5. Present and interpret qualitative and quantitative data, develop lines of argument and make sound judgements in accordance with basic theories and concepts;
- 6. Communicate the results of their study/work accurately and reliably in writing with structured and coherent arguments and using academic conventions;
- 7. Demonstrate scientific and mathematical literacy;

#### **Practical**

- 8. Use standard laboratory equipment confidently and correctly;
- 9. Demonstrate an awareness of laboratory safety and materials handling issues;
- 10. Take measurements, handle, record and process data;

## **Personal and Social**

- 11. Work independently and in a group including in a laboratory setting;
- 12. Manage their time and work to deadlines;
- 13. Identify and apply for a further programme of study as appropriate;
- 14. Demonstrate qualities and transferable skills which would be necessary for employment requiring the exercise of some personal responsibility.

## Careers and further study

Graduates can pursue further study and career paths in research, education or medicine. Possible professions include:

- microbiologist
- research scientist
- analytical chemist
- healthcare scientist.

Birkbeck offers a range of careers support to its students. You can find out more on <u>the careers</u> pages of our website.

# Academic regulations and course management

Birkbeck's academic regulations are contained in its <u>Common Award Scheme Regulations</u> and Policies published by year of application on the Birkbeck website.

You will have access to a course handbook on Moodle and this will outline how your course is managed, including who to contact if you have any questions about your module or course.

# Support for your study

Your learning at Birkbeck is supported by your teaching team and other resources and people in the College there to help you with your study. Birkbeck uses a virtual learning environment called Moodle and each course has a dedicated Moodle page and there are further Moodle sites for each of your modules. This will include your course handbook.

Birkbeck will introduce you to the Library and IT support, how to access materials online, including using Moodle, and provide you with an orientation which includes an online Moodle module to guide you through all of the support available. You will also be allocated a personal tutor and provided with information about learning support offered within your School and by the College.

<u>Please check our website for more information about student support services.</u> This covers the whole of your time as a student with us including learning support and support for your wellbeing.

# **Quality and standards at Birkbeck**

Birkbeck's courses are subject to our quality assurance procedures. This means that new courses must follow our design principles and meet the requirements of our academic regulations. Each new course or module is subject to a course approval process where the proposal is scrutinised by subject specialists, quality professionals and external representatives to ensure that it will offer an excellent student experience and meet the expectation of regulatory and other professional bodies.

You will be invited to participate in an online survey for each module you take. We take these surveys seriously and they are considered by the course team to develop both modules and the overall courses. Please take the time to complete any surveys you are sent as a student.

We conduct an annual process of reviewing our portfolio of courses which analyses student achievement, equality data and includes an action plan for each department to identify ongoing enhancements to our education, including changes made as a result of student feedback.

Our periodic review process is a regular check (usually every four years) on the courses by department with a specialist team including students.

Each course will have an external examiner associated with it who produces an annual report and any recommendations. Students can read the most recent external examiner reports on the course Moodle pages. Our courses are all subject to Birkbeck Baseline Standards for our Moodle module information. This supports the accessibility of our education including expectations of what information is provided online for students.

The information in this programme specification has been approved by the College's Academic Board and every effort has been made to ensure the accuracy of the information it contains.

Programme specifications are reviewed periodically. If any changes are made to courses, including core and/or compulsory modules, the relevant department is required to provide a revised programme specification. Students will be notified of any changes via Moodle.

<u>Further information</u> about specifications and an archive of programme specifications for the College's courses is available online.

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