## Module Catalogue Life Sciences Postgraduate Study Abroad with Internship 2024/5 Semester 1

## Please note, postgraduate students can take modules relating to their degree course only

As part of the Internship programme all students must take three modules per semester, including the following module in either Semester 1 or 2:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 5BUSS005X | [Professional and Personal Skills Development](#5BUSS005X) | Level 5 | Semester 1 or 2 | 20 | US Credits 4 / ECTS credits 10\* |

If you choose to take the Internship option this semester, then you are able to take two free-choice modules in addition to the above module. Please note that the above module carries Undergraduate credit.

| **Module Code** | **Module Name** | **Level** | **Semester** | **UK Credit Value** | **Credit Equivalency** |
| --- | --- | --- | --- | --- | --- |
| **Life Sciences** | | | | | |
| 7BIOL001W | [Fermentation Technology](#7BIOL001W) | 7 | Semester 1 | 20 | US Credits 4 / ECTS credits 10\* |
| 7BIOM007W | [Cellular Haematology](#7BIOM007W) | 7 | Semester 1 | 20 | US Credits 4 / ECTS credits 10\* |
| 7BIOM020W | [Immunopathology (Haematology-Cancer)](#7BIOM020W) | 7 | Semester 1 | 20 | US Credits 4 / ECTS credits 10\* |
| 7BIOM041W | [Bioinformatics](#7BIOM041W) | 7 | Semester 1 | 20 | US Credits 4 / ECTS credits 10\* |
| 7BIOT002W | [Industrial and Environmental Biotechnology](#7BIOT002W) | 7 | Semester 1 | 20 | US Credits 4 / ECTS credits 10\* |
| 7HMNT015W | [Postgraduate Research Methods for Health Sciences I](#7HMNT015W) | 7 | Semester 1 | 20 | US Credits 4 / ECTS credits 10\* |
| 7HMNT020W | [Essentials of Nutrition and Performance](#7HMNT020W) | 7 | Semester 1 | 20 | US Credits 4 / ECTS credits 10\* |
| 7HMNT026W | [Well-Being and Resilience in the Workplace](#7HMNT026W) | 7 | Semester 1 | 20 | US Credits 4 / ECTS credits 10\* |

\* All transcripts are issued in UK credits. Please note the recommendation of a 4 US credit value equivalency is provided as guidance. Final credit values for all modules for US students are decided by your home institution and will be dependent on its credit transfer policies.

## Internship Module

#### Professional and Personal Skills Development

**Module Code: 5BUSS005X**

**Level 5**

**Semester 1 or 2**

**Location: Marylebone**

**UK Credit Value: 20**

**Equivalent Credit Value: US Credits 4 / ECTS credits 10\***

Internship Programme Information: You can apply for a study abroad internship as part of a single semester or year-long study abroad programme at the University of Westminster, but the maximum duration of the internship is one semester. Alongside your academic studies, you will be expected to work 14 hours over two to three days per week in your internship. Internships are part-time and run for 12 weeks, until the end of the teaching period.   
  
Module Description: The module is designed to allow you to draw upon your experience in the workplace in order to reflect on (and to challenge) your behaviours, attitudes and assumptions at work. This greater self-awareness will help you to appreciate differences in cultural and ethical working practices. The module uses coaching tools to help you to discover your own solutions to issues, thus developing you as an ‘independent’ self-reliant learner and increasing your resilience. The module also fosters the development of your analytical thinking skills by applying relevant theory and concept to your work experiences. Your learning and practical experience is designed to enable you to reflect on both your work and learning so that you can articulate your global skills set to future employers.   
  
A reminder that that this module carries Undergraduate credit.   
**Assessment:** Individual Oral Presentation (25%), Individual Reflective Learning Log (25%), Essay (50%)   
\*All transcripts are issued in UK credits.

## Life Sciences

### Fermentation Technology

[**Module Code: 7BIOL001W**](#7BIOL001W_return)

**Level 7**

**Semester 1**

**Location: Cavendish**

**UK Credit Value: 20**

**Equivalent Credit Value: US Credits 4 / ECTS credits 10\***

Different media for small- and large-scale production of fermentation products, microbial strain/culture selection and development, microbial culture, sterilisation, modes and types of fermentation, oxygen requirement for culture, fermentation control systems, mixing, rheology, fermenter types and designs, scale-up/down.  
**Assessment:** Coursework (40%), Coursework (20%), Essay (40%)  
\*All transcripts are issued in UK credits.

### Cellular Haematology

[**Module Code: 7BIOM007W**](#7BIOM007W_return)

**Level 7**

**Semester 1**

**Location: Cavendish**

**UK Credit Value: 20**

**Equivalent Credit Value: US Credits 4 / ECTS credits 10\***

Haemopoiesis, including the role of haemopoietic stem cells and progenitors. Structure and roles of leucocytes and erythrocytes, including haemoglobin structure and function. Pathophysiology of anaemia (nutritional and haemolytic), including discussion of haemoglobinopathies. Haematological malignancies, including chronic and acute leukaemia as well as myelodysplastic and myeloproliferative disorders. Both clinical and laboratory aspects will be considered.  
**Assessment:** Essay (25%), Presentation Group (25%), Coursework (50%)  
\*All transcripts are issued in UK credits.

### Immunopathology (Haematology-Cancer)

[**Module Code: 7BIOM020W**](#7BIOM020W_return)

**Level 7**

**Semester 1**

**Location: Cavendish**

**UK Credit Value: 20**

**Equivalent Credit Value: US Credits 4 / ECTS credits 10\***

This module comprises lectures and case studies to give an understanding of modern advances in immunology and immunopathology, strategies for the diagnosis of inherited and acquired immunological disorders. The module aims to analyse modern concepts on the interface between innate and adaptive immune responses to intracellular and extracellular pathogens; to discuss and to illustrate cellular and molecular mechanisms of hypersensitivity and autoimmunity, primary and secondary immunodeficiency, transplantation of organs and tissues, anti-tumour immunity. Applications of modern methods of diagnosis of immunopathological disorders are presented in relation to current advances in fundamental and clinical immunology and immunopathology  
**Assessment:** Multiple-Choice Question Test (50%), Coursework (50%)  
\*All transcripts are issued in UK credits.

### Bioinformatics

[**Module Code: 7BIOM041W**](#7BIOM041W_return)

**Level 7**

**Semester 1**

**Location: Cavendish**

**UK Credit Value: 20**

**Equivalent Credit Value: US Credits 4 / ECTS credits 10\***

Bioinformatics lies at the heart of modern biology. This module introduces the discipline and shows how bioinformatics can help answer practical questions and solve problems in biology, medicine and pharmacology. Topics include DNA and protein databases, DNA and protein sequence alignment, protein structure prediction, drug discovery and molecular modelling.  
**Assessment:** Presentation (15%), Coursework (35%), Coursework (50%)  
\*All transcripts are issued in UK credits.

### Industrial and Environmental Biotechnology

[**Module Code: 7BIOT002W**](#7BIOT002W_return)

**Level 7**

**Semester 1**

**Location: Cavendish**

**UK Credit Value: 20**

**Equivalent Credit Value: US Credits 4 / ECTS credits 10\***

The module will explore applications of bacterial, fungal, and mammalian culture to the production of bio-products (e.g. enzymes, biopharmaceuticals etc.) and examine ways in which microorganisms are applied in the solution of environmental problems. The latest trends in the improvement of plant yield, tolerance to water/drought stress and pests as well as the use of plants as bioreactors will also be covered.  
**Assessment:** Coursework (20%), Coursework Practical (30%), Essay (50%)  
\*All transcripts are issued in UK credits.

### Postgraduate Research Methods for Health Sciences I

[**Module Code: 7HMNT015W**](#7HMNT015W_return)

**Level 7**

**Semester 1**

**Location: Cavendish**

**UK Credit Value: 20**

**Equivalent Credit Value: US Credits 4 / ECTS credits 10\***

The purpose of this module is to teach the principles and practice of research with a focus on qualitative and quantitative study designs and methods of data collection and processing. It will show how these designs and methods can be applied to evaluation studies as well as to research. It will provide a supportive and intellectually challenging environment within which students develop their knowledge, understanding and skills as researchers.  
**Assessment:** Essay (50%), Coursework (50%)  
\*All transcripts are issued in UK credits.

### Essentials of Nutrition and Performance

[**Module Code: 7HMNT020W**](#7HMNT020W_return)

**Level 7**

**Semester 1**

**Location: Cavendish**

**UK Credit Value: 20**

**Equivalent Credit Value: US Credits 4 / ECTS credits 10\***

Sound nutritional practices based on scientific research form the platform for athletic performance. This module provides students with an overview of the role of nutrition in regulating physiological processes associated with sport and exercise performance. Nutritional requirements and recommendations for physically active individuals are covered. The module also allows students the opportunity to assess the efficacy of nutritional strategies intended to enhance athletic performance.   
**Assessment:** Coursework (50%), Coursework (50%)  
\*All transcripts are issued in UK credits.

### Well-Being and Resilience in the Workplace

[**Module Code: 7HMNT026W**](#7HMNT026W_return)

**Level 7**

**Semester 1**

**Location: Cavendish**

**UK Credit Value: 20**

**Equivalent Credit Value: US Credits 4 / ECTS credits 10\***

This module will explore wellbeing and resilience interventions and programmes in workplace settings.  Students will explore both the generic and specific issues that diverse professions and organisations are facing in relation to stress, wellbeing and resilience.  They will also develop the skills and attributes needed to consult, design, deliver and evaluate bespoke workplace programmes that are both fit for purpose and evidence informed.  
**Assessment:** Coursework (50%), Coursework (50%)  
\*All transcripts are issued in UK credits.