

## Programme Specification

### BSc Pharmacology

For students entering Part 1 in September 2023

UCAS Code: B210

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**This document sets out key information about your Programme and forms part of your Terms and Conditions with the University of Reading.**

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| Awarding Institution                           | University of Reading  |
| Teaching Institution                           | University of Reading  |
| Length of Programme                            | 3 years  |
| Length of Programme with placement/year abroad | BSc Pharmacology with a Year in Industry - 4 years (UCAS Code: B211) |
| Accreditation                                  | N/A  |

### Programme information and content

The programme aims to produce graduates who have the knowledge, skills and professional behaviours to work as pharmacologists within drug discovery in the pharmaceutical industry or life sciences- related industries, universities or medical charities. Graduates will be prepared for further higher education, postgraduate courses and academia and have the personal and intellectual attributes necessary for life-long professional development. Such graduates will:

- possess core pharmacology knowledge and skills and appropriate attitudes
- have knowledge and understanding of related disciplines including life sciences e.g. molecular biology, physiology; relevant mathematics; the basics of medicinal chemistry; and how related disciplines can yield insights in pharmacology and vice versa.
- be innovative and adaptive graduates who can respond to the challenge of a changing global scientific landscape and develop the skills for lifelong learning e.g. independence, time management, organisation and planning, initiative, knowledge transfer; the ability to self-assess performance; an understanding of how to evaluate risk

|         |   |
|---------|---|
| Part 1: | In Part 1 you will be introduced to core concepts of science, and to key experimental techniques to allow development of skills to collect and interpret clinical and scientific data. You will be taught using a variety of teaching and assessment methods that enable you to develop independent and reflective learning skills. The year is made up of a range of 10 and 20 credit modules that provide you with core scientific knowledge whilst also introducing you to the skills and attitudes appropriate for pharmacology undergraduates, including mathematical knowledge that underpins today's science. You will also learn with and from other students doing different healthcare degree programmes. |
|---------|---|

|                              |  |
|------------------------------|--|
| Part 2:                      | In Part 2 you will build on your learning from Part 1 as your pharmacology knowledge is developed in a way that encourages you to further your basic knowledge and skills base. The year is made up of a range of 10 and 20 credit modules which will prepare you for the opportunity to spend a year working in industry and putting your knowledge into practice.  |
| Placement/Study abroad year: | Between the second and third year of the programme there is an optional industrial year, which provides students with the opportunity to develop their graduate employability skills. Completion of an industrial year will qualify students for BSc Pharmacology with a Year in Industry award. Industrial partners will be sought from stakeholders who will input industrial content to the degree programme.   |
| Part 3:                      | You will perform an extended laboratory-based or data analysis project which will develop practical skills sought by pharmaceutical, and life sciences-related, industry, some of which students can develop from their industrial placement. You will also have access to optional modules on cutting edge areas built around areas of staff research expertise. You will learn about societal aspects of pharmacology and develop core attributes and attitudes that will support a research-focused career. |

### Module information

Each part comprises 120 credits, allocated across a range of compulsory and optional modules as shown below. Compulsory modules are listed.

#### Part 1 Modules:

| Module   | Name                                      | Credits | Level |
|----------|---|---------|-------|
| BI1AP12  | Anatomy & Physiology                      | 20      | 4     |
| BI1BEC1  | Building Blocks of Life                   | 20      | 4     |
| BI1BP2   | Pathology                                 | 20      | 4     |
| BI1S1    | Introductory Microbiology                 | 10      | 4     |
| PM1MPAS1 | Clinical and Metabolic Biochemistry       | 10      | 4     |
| PM1PCOL1 | Principles of Drug Action                 | 10      | 4     |
| PM1PCOL2 | Key Skills for Pharmacology               | 10      | 4     |
| PM1PCOL3 | Mathematics & Statistics for Pharmacology | 20      | 4     |

#### Part 2 Modules:

| Module   | Name                     | Credits | Level |
|----------|--------------------------|---------|-------|
| BI2AP12  | Anatomy & Physiology 2   | 30      | 5     |
| BI2BCB5  | Clinical Biomedicine     | 20      | 5     |
| PM2MPAS2 | Medicines in Health Care | 20      | 5     |
| PM2PCOL1 | Molecular Drug Targets   | 10      | 5     |

|          |   |    |   |
|----------|---|----|---|
| PM2PCOL2 | Drug Design and Delivery                | 20 | 5 |
| PM2PCOL3 | Mathematical Modelling for Pharmacology | 20 | 5 |

**Modules during a placement year or study year (if applicable):**

| Module     | Name                 | Credits | Level |
|------------|----------------------|---------|-------|
| PM2PCOLIND | Industrial Placement | 120     | 5     |

Students on the 4 year version of the programme will take one 120 credit module (PM2PCOLIND) during their Work Experience or Study Abroad year.

If you take a year-long placement or study abroad, Part 3 as described below may be subject to variation.

**Part 3 Modules:**

| Module   | Name                               | Credits | Level |
|----------|------------------------------------|---------|-------|
| PM3PCOL1 | Research Project                   | 60      | 6     |
| PM3PCOL2 | Societal Impact of Pharmacology    | 10      | 6     |
| PM3PCOL3 | Clinical Pharmacology & Toxicology | 30      | 6     |

The remaining credits will be taken from a list of optional modules from the School of Chemistry, Food and Pharmacy, or from an approved list of modules from across the University.

**Optional modules:**

The optional modules available can vary from year to year. An indicative list of the range of optional modules for your Programme is set out in the Further Programme Information. Details of optional modules for each part, including any Additional Costs associated with the optional modules, will be made available to you prior to the beginning of the Part in which they are to be taken and you will be given an opportunity to express interest in the optional modules that you would like to take. Entry to optional modules will be at the discretion of the University and subject to availability and may be subject to pre-requisites, such as completion of another module. Although the University tries to ensure you are able to take the optional modules in which you have expressed interest this cannot be guaranteed.

**Additional costs of the programme**

- 1) Required text books: A wide variety of text books is available from the library, many as e-books. Students are advised to purchase own copies of some core texts at varying costs.
- 2) Specialist equipment or materials: A lab coat will cost approximately £10.
- 3) Printing facilities are available on campus at approximately £0.05 per page

4) Travel, accommodation and subsistence: Students may need to travel if they visit venues geographically further away from University (when significantly further away, the programme currently supports travel costs by reimbursements).

Costs are indicative and are subject to inflation and other price fluctuations. The estimates were calculated in 2022.

### **Placement opportunities**

Students will undertake experiential learning during their studies and will have the opportunity to complete an industrial placement year in the pharmaceutical or life science-related environment. Study abroad may be available for students on this programme.

### **Teaching and learning delivery:**

Teaching and learning are delivered in a variety of ways, including interactive lectures, practical skills workshops, case-based learning and small group work, laboratory-based practical and computer-aided practical sessions, and seminars.

Total study hours for each Part of your programme will be 1200 hours. The contact hours for your programme will depend upon your module combination; an average for a typical set of modules on this programme is approximately 400 hours in Part 1 and 2, and 650 hours/year for Part 3. In addition to your scheduled contact hours, you will be expected to undertake guided independent study. Information about module contact hours and the amount of independent study which a student is normally expected to undertake for a module is indicated in the relevant module description.

### **Accreditation details**

The programme is not accredited; however the education and training of pharmacologists is currently overseen by the Royal Society of Biology.

### **Assessment**

Assessment methods used will be according to those stated in the module descriptors to align to the learning outcomes. This means the programme is assessed through a combination of written examinations, coursework, oral examinations, and practical examinations.

### **Progression**

University Threshold Performance Requirements

The University-wide rules relating to 'threshold performance' as follows:

### *Part 1*

- (i) achieve an overall average of 40% over 120 credits taken in Part 1, where all the credits are at Level 4 or above; and
- (ii) achieve a mark of at least 30% in individual modules amounting to not less than 100 credits taken in Part 1.

In order to progress from Part 1 to Part 2, a student must achieve a threshold performance and:

- (iii) successful completion of specified coursework and /or examination components of relevant modules, as described in the module descriptions.

Students who have failed or are not qualified to progress to Part 2 are permitted one re-sit examination in each module (or failed required coursework element of a module) in which they fail to meet the progression requirements. The mark used for the purposes of progression will be the higher of the mark obtained in the original examination and the mark obtained in the re-examination.

Students who do not meet the above requirement but gain a University threshold performance at Part 1 may be eligible to transfer to another programme or to leave with a CertHE.

### *Part 2*

#### University Threshold Performance Requirements

To gain a threshold performance at Part 2, a student shall normally be required to:

- (i) achieve an overall average of 40% over 120 credits taken at Part 2; and
- (ii) achieve a mark of at least 40% in 80 credits taken in Part 2; and
- (iii) achieve a mark of at least 30% in 120 credits taken in Part 2, except that a mark below 30% may be condoned in no more than 20 credits of modules owned by the Department of Mathematics and Statistics.

In order to progress from Part 2 to Part 3 of the **3 year programme**, a student must achieve a threshold performance and:

- (iv) successful completion of specified coursework and / or examination components of relevant modules, as described in the module descriptions.

Students who have failed or are not qualified to progress to Part 3 are permitted one re-sit examination in each module (or failed required coursework element of a module) in which they fail to meet the progression requirements. The mark used for the purpose of progression will be the higher of the mark obtained in the original examination and the mark obtained in the re-examination.

Students who re-sit examinations at Part 2 and meet the BSc Pharmacology progression criteria will have their marks in those modules capped at 40% for degree classification purposes in accordance with the University regulations.

In order to progress from Part 2 to Part 3 in the **4 year programme**, a student must achieve a threshold performance and:

(iv) successful completion of specified coursework and / or examination components of relevant modules, as described in the module descriptions; and

(v) obtain a pass in the professional/work placement or study abroad year. Students who fail the professional/placement year will transfer to the non-placement year version of the programme.

Students who do not meet the above requirements for progression to Part 3 but gain a threshold performance may be eligible to transfer to another programme or leave with a DipHE.

Classification: Bachelors' degrees

The University's honours classification scheme is based on the following:

Mark Interpretation

70% - 100% First class

60% - 69% Upper Second class

50% - 59% Lower Second class

40% - 49% Third class

35% - 39% Below Honours Standard

0% - 39% Fail

The weighting of the Parts/Years in the calculation of the degree classification is:

Three year programmes:

Part 2: one-third

Part 3: two-thirds

Four year programmes, including professional/work placement or study abroad:

Part 2: one-third

Placement/Study Abroad Year abroad not included in the classification

Part 3: two-thirds

**For further information about your Programme please refer to the Programme Handbook and the relevant module descriptions, which are available at <http://www.reading.ac.uk/module/>. The Programme Handbook and the relevant module descriptions do not form part of your Terms and Conditions with the University of Reading.**

BSc Pharmacology for students entering Part 1 in session 2023/24

17 June 2022

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