

Course Specification

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Status:	Course currently being validated

Core Information

Awarding Body / Institution:	University of Wolverhampton		
School / Institute:	School of Pharmacy		
Course Code(s):	PY001T01UV PY001T31UV	Full-time Part-time	4 Years 8 Years
UCAS Code:	B213		
Course Title:	BSc (Hons) Pharmacology with Fou	ndation Year	
Hierarchy of Awards:	Bachelor of Science with Honours Pharmacology Bachelor of Science Pharmacology Diploma of Higher Education Pharmacology Certificate of Higher Education Pharmacology Foundation and Preparatory Studies Pharmacology		
Language of Study:	English		
Date of DAG approval:	01/Apr/2020		
Last Review:			
Course Specification valid from:	2019/0		
Course Specification valid to:	2022/3		

Academic Staff

Course Leader:	Dr Stephen Anderson
Head of Department:	Dr Colin Brown

Course Information

Location of Delivery:	University of Wolverhampton
Category of Partnership:	Not delivered in partnership
Teaching Institution:	University of Wolverhampton
Open / Closed Course:	This course is open to all suitably qualified candidates.

Entry Requirements:

Entry requirements are subject to regular review. The entry requirements applicable to a particular academic year will be published on the University website (and externally as appropriate e.g. UCAS

Distinctive Features of the Course:

The Foundation Year provides an alternative entry point for the full honours degree. The Course will prepare students for the rigours and study requirements of a degree and will introduce the skills which are essential in order for students to be successful.

Pharmacology is long established within the Faculty of Science and Engineering and is underpinned by active areas of research in peptide pharmacology, vascular pharmacology and CNS pharmacology. You will be taught using an integrated approach across all three years of the course which will equip you for the diverse career pathways available to you.

Educational Aims of the Course:

The BSc Pharmacology course will provide you with a range of progressive, coherent and challenging learning opportunities informed by research, scholarly activity and appropriate development of skills. Specifically, the course will provide you with a deep-rooted understanding of the fundamentals principles of chemistry and biology as applicable to pharmacology. You will gain an understanding of normal and abnormal bodily function, the biology of disease (aetiology and epidemiology) and the absorption, distribution, metabolism and excretion of medicines and their actions (interactions, adverse reactions and misuse) and therapeutic uses. You will also be supported in the development of intellectual and key interpersonal skills as well as subject knowledge that will equip you for life-long learning and employability. You will be eligible to transfer over to MSci Pharmacology Science course providing you attain a 2:2 standard by the end of level 5.

The course aims to produce high quality pharmacology graduates with the generic, subject-specific and transferable knowledge and skills suited to a career in the pharmaceutical industry or other related laboratory based scientific disciplines. You will have the opportunity to study the Wolverhampton Employability Award up to gold level. You will also be supported in seeking placement opportunities either as a sandwich year or over the summer vacation.

Intakes:	
September	
Major Source of Funding:	
Office for Students (OFS)	
Tuition Fees:	

Tuition fees are reviewed on an annual basis. The fees applicable to a particular academic year will be published on the University website.

Year	Status	Mode	Amount
2020/1	Home / EU	Full Time / Sandwich	£9250.00
2020/1	Overseas	Full Time / Sandwich	£12250.00
2020/1	Н	Part Time	£3050.00
2020/1	Overseas	Part Time	£6125.00
2021/2	Н	Full Time / Sandwich	£9250.00
2021/2	Overseas	Full Time / Sandwich	£13450.00
2021/2	Н	Part Time	£3100.00
2022/3	Н	Full Time / Sandwich	£9250.00
2022/3	Overseas	Full Time / Sandwich	£13950.00
2022/3	Н	Part Time	£3120.00
2023/4	Н	Full Time / Sandwich	£9250.00
2023/4	Overseas	Full Time / Sandwich	£14950.00
2023/4	Н	Part Time	£4625
2024/5	Н	Full Time / Sandwich	£9250.00
2024/5	Overseas	Full Time / Sandwich	£15450.00
2024/5	Н	Part Time	£4625.00

PSRB:

PY001T01UV (Full-time)

Professional Accreditation Body: Royal Society of Biology

Accrediting Body: Royal Society of Biology

Accreditation Statement:

"Accredited by the Royal Society of Biology for the purpose of meeting, in part, the academic and experience requirement of membership and Chartered Biologist (CBiol)."

Approved	Start	Expected End	Renewal
01/Jul/2020	01/Jul/2020		30/Jun/2025

PY001T31UV (Part-time)

Professional Accreditation Body: Royal Society of Biology

Accrediting Body: Royal Society of Biology

Accreditation Statement:

"Accredited by the Royal Society of Biology for the purpose of meeting, in part, the academic and experience requirement of membership and Chartered Biologist (CBiol)."

Approved	Start	Expected End	Renewal
01/Jul/2020	01/Jul/2020		30/Jun/2025

Course Structure:

September (Full-time)

Module	Title	Credits	Period	Туре
3PY002	Communication and study skills	20	SEM1	Core
3CC004	Problem Solving in Science and Technology	20	SEM1	Core
3MM003	Foundation Mathematics I	20	SEM1	Core
3PY003	Orientation to Pharmaceutical Science	20	SEM2	Core

Group 01 | Min Value: 20 | Max Value: 20

3AB003	Fundamentals of Bioscience	20	SEM2	
3BM003	Fundamentals of Healthcare Science	20	SEM2	
3MM004	Foundation Mathematics II	20	SEM2	
3CH002	Chemistry for Foundation Sciences	20	SEM2	Core

September (Full-time)

Module	Title	Credits	Period	Туре
4PY014	Pharmacology and Toxicology	20	SEM1	Core
4BM016	Human Form & Function	20	SEM1	Core
4PY012	Scientific Communication and Undergraduate Development	20	SEM1	Core
4PY013	Molecular Basis of Life	20	SEM2	Core
4PY008	Introduction to Microbiology	20	SEM2	Core
4PY009	Principles of Drug Action	20	SEM2	Core

September (Full-time)

Module	Title	Credits	Period	Туре
5BC001	Molecular Biosciences	20	SEM1	Core
5PY017	Pharmaceutical Microbiology	20	SEM1	Core
5PY010	Therapeutic Pharmacology	20	SEM1	Core
5PY016	Experimental Pharmacology	20	SEM2	Core
5PY018	Drug Design and Development	20	SEM2	Core
5PY024	Further Therapeutic Pharmacology	20	SEM2	Core

September (Full-time)

Module	Title	Credits	Period	Туре
6BC006	Bioinformatics	20	SEM1	Core
6PY002	Pharmaceutical Biotechnology and Molecular Biology	20	SEM1	Core
6PY004	Honours Project (Pharmaceutical Sciences and Pharmacology)	40	YEAR	Core
6PY007	Current Advances in Pharmacology	20	SEM2	Core
6PY006	Biochemical Pharmacology	20	SEM2	Core

Please note: Optional modules might not run every year, the course team will decide on an annual basis which options will be running, based on student demand and academic factors, to create the best learning experience.

Learning, Teaching and Assessment

Academic Regulations Exemption:

Reference Points:

UK Quality Code for Higher Education Qualifications and Credit Frameworks Subject Benchmark Statements University Policies and Regulations Equality Act (2010)

Overview of Assessment:

As part of the course approval process, the course learning outcomes were mapped to each of the modules forming the diet of the programme of study. This process confirmed that all course learning outcomes can be met through successful completion of the modules. This mapping applies to the final award as well as to all of the intermediate awards.

Learning Outcomes Modules
CERTHE01 "Demonstrate knowledge of the underlying
concepts and principles associated with your area(s) of study,
and an ability to evaluate and interpret these within the
context of that area of study"

<u>CERTHEO</u> "Demonstrate an ability to present, evaluate and interpret qualitative and quantitative data, in order to develop lines of argument and make sound judgements in accordance with basic theories and concepts of your subject(s) of study."

Modules

CERTHE03 Evaluate the appropriateness of different approaches to solving problems related to your area(s) of study and/or work

CERTHE04 "Communicate the results of your study/work accurately and reliably, and with structured and coherent arguments"

CERTHE05 Demonstrate the qualities and transferable skills necessary for employment requiring the exercise of some personal responsibility

BHONS01 "Demonstrate a systematic understanding of key aspects of pharmacology, including acquisition of coherent and detailed knowledge, at least some of which is at, or informed by, the forefront of defined aspects of a discipline with an appreciation of the uncertainty, ambiguity and limits of knowledge"

BHONS02 "Demonstrate an ability to deploy accurately established techniques of analysis and enquiry within pharmacology and apply the methods and techniques that they have learned to review, consolidate, extend and apply your knowledge and understanding, and to initiate and carry out projects."

BHONS03 "Demonstrate conceptual understanding that enables the student: A) to devise and sustain arguments, and/or to solve problems, using ideas and techniques, some of which are at the forefront of a discipline. B) to describe and comment upon particular aspects of current research, or equivalent advanced scholarship, in the discipline."

BHONS04 "Demonstrate the ability to manage your own learning, and to make use of scholarly reviews and primary sources (for example, refereed research articles and/or original materials appropriate to the discipline) and communicate information, ideas, problems and solutions to both specialist and non-specialist audiences."

BHONS05 "Critically evaluate arguments, assumptions, abstract concepts and data (that may be incomplete), to make judgements, and to frame appropriate questions to achieve a solution - or identify a range of solutions - to a problem"

BHONS06 Demonstrate the qualities and transferable skills necessary for employment requiring: A) the exercise of initiative and personal responsibility. B) decision-making in complex and unpredictable contexts. C) the learning ability needed to undertake appropriate further training of a professional or equivalent nature.

DIPHE01 "Demonstrate knowledge and critical understanding of the well-established principles of your area(s) of study, and of the way in which those principles have developed with an understanding of the limits of your knowledge, and how this influences analyses and interpretations based on that knowledge."

DIPHE02 "Demonstrate the ability to apply underlying concepts and principles outside the context in which they were first studied, including, where appropriate, the application of those principles in an employment context"

DIPHE03 "Demonstrate knowledge of the main methods of enquiry in the subject(s) relevant to the named award, and ability to evaluate critically the appropriateness of different approaches to solving problems in the field of study"

DIPHE04 "Use a range of established techniques to initiate and undertake critical analysis of information, and to propose solutions to problems arising from that analysis"

DIPHE05 "Effectively communicate information, arguments and analysis in a variety of forms to specialist and nonspecialist audiences, and deploy key techniques of the discipline effectively"

DIPHE06 "Demonstrate the qualities and transferable skills necessary for employment, requiring the exercise of personal responsibility and decision-making and undertake further training, developing existing skills and acquire new competences that will enable them to assume significant responsibility within organisations."

BHONSN01 "Demonstrate a systematic understanding of key aspects of pharmacology, including acquisition of coherent and detailed knowledge, at least some of which is at, or informed by, the forefront of defined aspects of a discipline with an appreciation of the uncertainty, ambiguity and limits of knowledge"

BHONSN02 "Demonstrate an ability to deploy accurately established techniques of analysis and enquiry within pharmacology and apply the methods and techniques that they have learned to review, consolidate, extend and apply your knowledge and understanding, and to initiate and carry out projects."

BHONSN03 "Demonstrate conceptual understanding that enables the student: A) to devise and sustain arguments, and/or to solve problems, using ideas and techniques, some of which are at the forefront of a discipline. B) to describe and comment upon particular aspects of current research, or equivalent advanced scholarship, in the discipline."

BHONSN04 "Demonstrate the ability to manage your own learning, and to make use of scholarly reviews and primary sources (for example, refereed research articles and/or original materials appropriate to the discipline) and communicate information, ideas, problems and solutions to both specialist and non-specialist audiences."

BHONSN05 "Critically evaluate arguments, assumptions, abstract concepts and data (that may be incomplete), to make judgements, and to frame appropriate questions to achieve a solution - or identify a range of solutions - to a problem"

BHONSN06 Demonstrate the qualities and transferable skills necessary for employment requiring: A) the exercise of initiative and personal responsibility. B) decision-making in complex and unpredictable contexts. C) the learning ability needed to undertake appropriate further training of a professional or equivalent nature.

UGCRED01 Solve real world problems using mathematical and statistical techniques.

UGCRED02 Communicate scientifically using oral and written skills to provide information to a variety of audiences.

UGCRED03 Demonstrate and apply problem solving skills to a range of scientific and technological scenarios

UGCRED05 Demonstrate personal development in terms of career choice.

Teaching, Learning and Assessment:

You will undertake a wide range of learning activities including:-.

- Computer based learning
- Supported learning using the University VLE (CANVAS) for information, synchronous and asynchronous
- communications
- Lectures
- Tutorials (small group)
- Tutorials (one-to-one)
- Workshops
- Case studies
- Structured laboratory exercises
- Individual structured assignment-based learning
- Directed study
- Individual or group investigative practical exercises
- Individual and group research project investigations
- Group work to develop and assess a wide range of manipulative, logic and other transferable skills.

Assessment methods will include:-

- Written reports
- Essays
- Literature reviews
- Exams
- Group presentations
- Poster presentations

All summative assessments will be supported by equivalent formative assessments which will enable you to gain the skills necessary to achieve the learning outcomes of the course. A particular focus will be placed on practical and analytical skills and support to develop these will be provided through extensive hands on training at each level of the course. Analytical skills will be developed sequentially throughout each year of the course and you will gain extensive experience in data generation, interpretation and manipulation. Workshops and small group tutorials will provide extensive support in developing these skills.

The overall aim of the course is to develop independent learners who are able to reflect on their learning in a professional manner and apply acquired knowledge in an integrated fashion.

Assessment Methods:

At the University of Wolverhampton, a variety of modes of assessment will be used to support and test your learning and progress and to help you develop capabilities that are valued beyond your University studies and into your working life. Your course may include a variety of assessment activities:

Written examinations (including online examinations, open and closed book examinations and quizzes) Coursework (for example, essays, reports, portfolios, project proposals and briefs, CVs, poster presentation) Practical (for example, oral and video presentations, laboratory work, performances, practical skills assessment)

In the final year of your undergraduate degree, and at the end of your postgraduate degree, you are likely to be expected to write an extended piece of work or research, such as a dissertation or a practice-based piece of research.

Student Support:

General University support:

University Learning Centres are the key source of academic information for students. Learning Centres provide physical library resources (books, journal, DVDs etc.) and offer a range of study areas to allow students to study in the environment that suit them best: Social areas, quiet and silent areas. Learning Centres also provide access to wide range of online information sources, including eBooks, e-Journals and subject databases.

Learning Centres also provide students with academic skills support via the Skills for Learning programme. Students on campus can attend workshops or ask for one-to-one help on a range of skills such as academic writing and referencing. Students can access a range of online skills material at: <u>www.wlv.ac.uk/lib/skills</u> The University Student Support website offers advice on a variety of matters (careers, counselling, student union advice, etc.) Students can also access these services by booking appointment with the SU, careers, counselling services, etc.

Course Specific Support

Enhanced learning support is provided in the following areas:

- 1. Support for mathematics and analytic based modules
- 2. Report writing and oral/presentation communications skills
- 3. Learning centre literature searches and information searches
- 4. Practical/lab/experimental activities and reporting
- 5. Promotion of independent learning during tutorials, face-to-face sessions
- 6. Formative assessment opportunities
- 7. Face-to-face tutorial sessions.

Employability in the Curriculum:

The pharmaceutical and biotechnology sectors are currently growth areas in the UK and successful study in pharmacology will open up a range of careers in biochemical, medical, pharmaceutical, chemical and related areas. Specifically, graduates are likely to find employment in research and development in the pharmaceutical and medical sectors. Other career outlets are possible and include work in hospital laboratories, forensic science, drug analysis, pharmaceutical marketing and sales and medical writing. Graduates will demonstrate the generic, subject-specific and transferable knowledge and skills that form a sound basis for further postgraduate study and/or research and their continuing development.



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