Course Specification

Published Date:	07-Apr-2022
Produced By:	Multi Type Usr Record For All Personnel
Status:	Validated

Core Information

Awarding Body / Institution:	University of Wolverhampton		
School / Institute:	School of Pharmacy		
Course Code(s):	PY017Q01UV	Full-time	4 Years
UCAS Code:	B211		
Course Title:	MSci (Hons) Pharmacology		
Hierarchy of Awards:	Master in Science with Honours Pharmacology Bachelor of Science with Honours Pharmacology Bachelor of Science Pharmacology Diploma of Higher Education Pharmacology Certificate of Higher Education Pharmacology University Statement of Credit University Statement of Credit		
Language of Study:	English		
Date of DAG approval:	25/Sep/2017		
Last Review:	2016/7		
Course Specification valid from:	2016/7		
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

Entry requirements for MSci Pharmacology

A-level minimum of ABB or AAC to include Chemistry and Biology.

BTEC Extended Diploma in Applied Science with DDM

Students studying on BSc Pharmacology may transfer directly onto the MSci Pharmacology subject to gaining a 2:2(Hons) equivalent at level 6. Due to funding requirements, students wishing to do this must transfer to the MSci programme before the end on level 6 semester 1

Scottish Highers – CBBBB

(equates to 129 points)

International Baccalaureate: - 32+ overall with a minimum of 5 in higher level biology plus a minimum of 4 in two additional higher level subjects to include one other science subject preferably chemistry or further maths

Foundation Years – External foundation Years: To be considered by the admission tutor on application. Home Foundation Year: Minimum of 50% average across all modules for students wishing to directly access the MSci programme.

Other entry qualifications may be acceptable and will be considered on an individual basis.

Distinctive Features of the Course:

The MSci 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. At Masters level you will have the opportunity to undertake in-depth study of new and emerging themes in pharmacology which will equip you with cutting edge knowledge in the subject and enable you to specialise in an area of choice

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.

Educational Aims of the Course:

1. Apply a range of graduate skills to investigation in pharmacological science
2. Critically evaluate the development of new therapeutic agents
3. Demonstrate the ability to use a range of analytical techniques in pharmacology
4. Relate the pharmacological actions of drugs to their efficacy in achieving therapeutic effects
5. Synthesise and interpret new knowledge and apply it to the field of pharmacology
6. Design, implement and evaluate scientific research in a given area of pharmacology

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	H	Full Time / Sandwich	£9250.00
2020/1	Overseas	Full Time / Sandwich	£12250.00
2021/2	H	Full Time / Sandwich	£9250.00
2021/2	Overseas	Full Time / Sandwich	£12950.00
2022/3	H	Full Time / Sandwich	£9250.00
2022/3	Overseas	Full Time / Sandwich	£13450.00

PSRB:

None

Course Structure:

September (Full-time)

Full time and Sandwich Undergraduate Honours students normally study 120 credits per academic year; 60 credits semester 1 and 60 credits semester 2.

Part time students study alongside full time students. However, they do not study more than 80 credits in each academic calendar year.

Module	Title	Credits	Period	Type
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)

Full time and Sandwich Undergraduate Honours students normally study 120 credits per academic year; 60 credits semester 1 and 60 credits semester 2.

Part time students study alongside full time students. However, they do not study more than 80 credits in each academic calendar year.

Module	Title	Credits	Period	Type
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)

Full time and Sandwich Undergraduate Honours students normally study 120 credits per academic year; 60 credits semester 1 and 60 credits semester 2.

Part time students study alongside full time students. However, they do not study more than 80 credits in each academic calendar year.

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

September (Full-time)

Full time and Sandwich Undergraduate Honours students normally study 120 credits per academic year; 60 credits semester 1 and 60 credits semester 2.

Part time students study alongside full time students. However, they do not study more than 80 credits in each academic calendar year.

Module	Title	Credits	Period	Type
7PY011	Research Methods	20	SEM1	Core
7PY010	Molecular Pharmacology	20	SEM1	Core
7PY027	Advanced Therapeutics	20	SEM1	Core
7PY024	Frontiers in Pharmacology	20	SEM2	Core
7PY013	Enhanced pharmacy clinical and prescribing skills	20	SEM2	Core
7PY026	Molecular Medicine	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:

N/A

Reference Points:

- Quality Code - Part A: Setting and Maintaining Academic Standards. Including :
- Qualifications Frameworks
- Characteristics Statements
- Credit Frameworks
- Subject Benchmark Statements - QAA Benchmarks for Pharmacy: http://www.qaa.ac.uk/academicinfrastructure/benchmark/honours/pharmacy
- British Pharmacological Society Indicative Syllabus 2004
- Quality Code - Part B: Assuring and Enhancing Academic Quality
- 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.

XX

Learning Outcomes	Modules
CertHE Course Learning Outcome 1 (CHECLO1) "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"	
CertHE Course Learning Outcome 2 (CHECLO2) "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."	
CertHE Course Learning Outcome 3 (CHECLO3) Evaluate the appropriateness of different approaches to solving problems related to your area(s) of study and/or work	
CertHE Course Learning Outcome 4 (CHECLO4) "Communicate the results of your study/work accurately and reliably, and with structured and coherent arguments"	
CertHE Course Learning Outcome 5 (CHECLO5) Demonstrate the qualities and transferable skills necessary for employment requiring the exercise of some personal responsibility	
DipHE Course Learning Outcome 1 (DHECLO1) "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."	
DipHE Course Learning Outcome 2 (DHECLO2) "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"	
DipHE Course Learning Outcome 3 (DHECLO3) "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"	
DipHE Course Learning Outcome 4 (DHECLO4) "Use a range of established techniques to initiate and undertake critical analysis of information, and to propose solutions to problems arising from that analysis"	
DipHE Course Learning Outcome 5 (DHECLO5) "Effectively communicate information, arguments and analysis in a variety of forms to specialist and non-specialist audiences, and deploy key techniques of the discipline effectively"	
DipHE Course Learning Outcome 6 (DHECLO6) "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."	
Ordinary Course Learning Outcome 1 (ORDCLO1) "Demonstrate a systematic understanding of key aspects of your field of study, 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"

Ordinary Course Learning Outcome 2 (ORDCLO2)
"Demonstrate an ability to deploy accurately established techniques of analysis and enquiry within a discipline 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."

Ordinary Course Learning Outcome 3 (ORDCLO3)
"Demonstrate conceptual understanding that enables the student: 1. to devise and sustain arguments, and/or to solve problems, using ideas and techniques, some of which are at the forefront of a discipline 2. to describe and comment upon particular aspects of current research, or equivalent advanced scholarship, in the discipline"

Ordinary Course Learning Outcome 4 (ORDCLO4)
"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."

Ordinary Course Learning Outcome 5 (ORDCLO5) "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"

Ordinary Course Learning Outcome 6 (ORDCLO6)
Demonstrate the qualities and transferable skills necessary for employment requiring: 1. the exercise of initiative and personal responsibility 2. decision-making in complex and unpredictable situations 3. the learning ability needed to undertake appropriate further training of a professional or equivalent nature.

Honours Course Learning Outcome 1 (DEGCLO1)
"Demonstrate a systematic understanding of key aspects of your field of study, 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"

Honours Course Learning Outcome 2 (DEGCLO2)
"Demonstrate an ability to deploy accurately established techniques of analysis and enquiry within a discipline 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."

Honours Course Learning Outcome 3 (DEGCLO3)
"Demonstrate conceptual understanding that enables the student: 1.   to devise and sustain arguments, and/or to solve problems, using ideas and techniques, some of which are at the forefront of a discipline 2. to describe and comment upon particular aspects of current research, or equivalent advanced scholarship, in the discipline."

Honours Course Learning Outcome 4 (DEGCLO4)
"Demonstrate the ability to manage your own learning, and to make use of scholarly reviews and primary sources (for

Learning Outcomes	Modules

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."

Honours Course Learning Outcome 5 (DEGCLO5) "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"

Honours Course Learning Outcome 6 (DEGCLO6) Demonstrate the qualities and transferable skills necessary for employment requiring: 1. the exercise of initiative and personal responsibility 2. decision-making in complex and unpredictable contexts. 3. the learning ability needed to undertake appropriate further training of a professional or equivalent nature.

Integrated Masters Course Learning Outcome 1 (IMACLO1) Apply a range of graduate skills to investigation in pharmacological science

Integrated Masters Course Learning Outcome 2 (IMACLO2) Critically evaluate the development of new therapeutic agents

Integrated Masters Course Learning Outcome 3 (IMACLO3) Demonstrate the ability to use a range of analytical techniques in pharmacology

Integrated Masters Course Learning Outcome 4 (IMACLO4) Relate the pharmacological actions of drugs to their efficacy in achieving therapeutic effects

Integrated Masters Course Learning Outcome 5 (IMACLO5) Synthesise and interpret new knowledge and apply it to the field of pharmacology

Integrated Masters Course Learning Outcome 6 (IMACLO6) "Design, implement and evaluate scientific research in a given area of Pharmacology"

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. Feedback on student performance and achievement is embedded throughout the course and will be provided at group and individual levels via review sessions, formative exercises, written comments and individual student appointments. 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:

Students will be assigned individual tutors who will be available to discuss academic progress. Students will also be made aware of the learning support available via the learning centre. Academic study skills are embedded into the course.

Employability in the Curriculum:

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.

THE UNIVERSITY OF OPPORTUNITY