

Course Specification

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Core Information

Awarding Body / Institution:	University of Wolverhampton		
School / Institute:	School of Pharmacy		
Course Code(s):	PY013S01UV	Full-time	2 Years
UCAS Code:	8F15		
Course Title:	HND Pharmaceutical Science		
Hierarchy of Awards:	Higher National Diploma Pharmaceutical Science awarded by the University of Wolverhampton Certificate of Higher Education Pharmaceutical Science awarded by the University of Wolverhampton University Statement of Credit University Statement of Credit		
Language of Study:	English		
Date of DAG approval:	10/May/2017		
Last Review:	2014/5		
Course Specification valid from:	2012/3		
Course Specification valid to:	2020/1		

Academic Staff

Course Leader:	Dr Waseem Kaialy
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)

2017 Entry

- A-Level minimum of C or EE to include Chemistry.
- Access to Higher Education Diploma with 60 credits, 45 Level 3 credits of which 18 must be in Science and achieved with a minimum pass
- BTEC QCF Level 3 Diploma Applied Science with minimum PP.
- Applicants will normally be expected to hold GCSE English and Maths at grade C+/4 or equivalent
- If you've got other qualifications or relevant experience, please contact [The Gateway](#) for further advice before applying.
- International entry requirements and application guidance can be found [here](#)

Those who do not meet the entry requirements may be offered an alternative course

Distinctive Features of the Course:

The emphasis throughout the course will be on the applied nature of the study of the pharmaceutical sciences in terms of how fundamental knowledge can be applied to tangible vocational situations and problems, together with the acquisition of practical and generic skills.

The intention of this approach will be to prepare students for their chosen career in any of the varied career options made available.

To achieve this the award is structured to enable challenges to apply information effectively, to work in teams, to gain actual industrial experience, to learn from the experiences of professionals, to acquire technical competence and to develop generic and time management skills.

Educational Aims of the Course:

Pharmacy and related science programmes at the University of Wolverhampton have the generic aims to:

- Allow you to gain those experiences and abilities to enter at an appropriate level and achieve to the maximum of your potential. The course will provide progressive, coherent and challenging learning opportunities informed by research, scholarly activity and appropriate development of skills.
- Enable you to achieve clearly defined subject specific and generic academic outcomes and to develop a range of key skills to fit you for subsequent employment and/or further study,
- Encourage you to take responsibility for your own learning, foster a spirit of enquiry, and develop attitudes and skills to underpin independent, life-long learning.

Pharmaceutical Science is a relatively new discipline and is concerned with fostering a multi-disciplinary approach towards the study of exciting new developments in the chemical, biological and biomedical science areas focusing upon the biochemistry, pharmacology, design, methods of analysis and delivery of pharmaceutical substances. This course aims to produce high quality pharmaceutical science diplomates with the generic, subject-specific and transferable knowledge and skills suited to a career in the pharmaceutical industry or other related laboratory based scientific discipline.

The Course aims to:

- To support you in the development of intellectual and key interpersonal skills as well as subject knowledge that will equip you for life-long learning.
- To develop a knowledge of the physico-chemical and biological principles necessary to understand the sourcing, preparation, analysis and properties of medicinal agents. This will include the design, delivery, mode of action, therapeutic application and clinical usage of medicines.
- To encourage the development of practical and problem solving skills, research methods and the techniques and processes necessary for the evaluation, critical appraisal and systematic review of pharmaceutical science.

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	£8600.00
2020/1	Overseas	Full Time	£12250.00
2021/2	H	Full Time	£8600.00
2021/2	Overseas	Full Time	£12950.00
2022/3	H	Full Time	£9000.00
2022/3	Overseas	Full Time	£13450.00

PSRB:

None

Course Structure:

September (Full-time)

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
4PY011	The Physicochemical Nature of Drugs	20	SEM1	Core
4PY012	Scientific Communication and Undergraduate Development	20	SEM1	Core
4BM016	Human Form & Function	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)

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
5PY010	Therapeutic Pharmacology	20	SEM1	Core
5PY017	Pharmaceutical Microbiology	20	SEM1	Core
5PY015	Practical Pharmaceutical Techniques	20	SEM2	Core
5PY023	Contemporary Drug Design	20	SEM2	Core
5PY014	Principles of Drug Development and Formulation	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:

None

Reference Points:

- This course has been developed with reference to the Code of Practice of the QAA for the assurance of academic quality and standards in higher education, the subject benchmark statement for 'Pharmacy' (2002).
- The requirements for the *Accreditation of UK Pharmacy Degree Courses* (Royal Pharmaceutical Society of Great Britain, 2003) including those stemming from European Directive 85/432/EEC and the resolutions of the EC Advisory Committee on Pharmaceutical Training.
- The Specification for the HND Applied Biology and HND Applied Chemistry (Edexcel).
- The course also makes reference to the Equality Act (2010) and the assessment and student guidance information of the University of Wolverhampton.

Overview of Assessment:

Learning Outcomes

Modules

HNC1 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.

HNC2 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.

HNC3 Evaluate the appropriateness of different approaches to solving problems related to your area(s) of study and/or work.

HNC4 Communicate the results of your study/work accurately and reliably, and with structured and coherent arguments.

HNC5 Demonstrate the qualities and transferable skills necessary for employment requiring the exercise of some personal responsibility.

HND1 Apply a range of practical skills to the investigation of pharmaceutical compounds and understand their effects on the human body.

HND2 Design, implement and evaluate practical outcomes in pharmaceutical science.

HND3 Discuss and interpret modern concepts of disease.

HND4 Discuss and evaluate appropriate methodologies for the manufacture of pharmaceutical processes.

Teaching, Learning and Assessment:

Relevant course material will be delivered principally through lectures, classroom discussion, group work, e-media (e.g. e-portfolios, CANVAS) and practical sessions - including class and laboratory-based. Depending on the module studied there will be different emphases on different methods, however there will be a strong emphasis on applying knowledge through practicals and problem-solving approaches across all modules and levels of study.

Fundamental principles will be reinforced and given applied relevance by case studies within tutorials and seminars. Group working will be encouraged both within formal sessions and on-line. Practical skills will be undertaken and practiced to increasing levels of independence from the use of elementary equipment, and to more advanced skills development.

Vocational experience and relevance will be promoted by the Work Experience module and the use within modules of presentations by guest speakers with vocational specialisms to emphasise the applied relevance of module content. Students are required to use work experience to enhance employability and to develop personal course specialisms.

Digital literacy: Use of generic and subject-specific IT is essential to all aspects of the course. Students will routinely access e-information and engage with e-learning via CANVAS. Additionally they will develop familiarity with subject-specific IT, such as geographical information systems, digital media, Global Positioning Systems and animal tracking technologies.

Knowledgeable and Enterprising: Applying skills and knowledge to real-world scenarios is again a central tenet of the course and is evidenced throughout all levels. Such skills develop critical thinking and prepare students for the challenges posed by professional work environments.

Global citizens: The course has both by design and default a global perspective. Examples and case studies take an international viewpoint to reflect the student's wider interests.

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:

Your learning is supported through the standard university infrastructure of personal tutors, module tutors, course leaders, demonstrators and learning centre staff. One of the key areas in the biological sciences is the small group and one-on-one interaction with staff in the laboratory. There is a strong emphasis here on practical techniques supported by excellent equipment provision and extensive staff experience.

Key skills such as time management, referencing and oral presentations, will be introduced early in the course then developed throughout all modules to a greater or lesser extent. We believe that study skills are not separate from subject matter, so such study skills have been integrated into subject-specific modules to make them more relevant to student interests.

Employability in the Curriculum:

The pharmaceutical and biotechnology sectors are currently growth areas in the UK and successful study in pharmaceutical science 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, medical writing and teaching.

HND qualifications are widely recognised in the scientific establishment as vocational courses which prepare students for vocational employment. As such, the skills provided in the course will provide opportunities in the technical disciplines at technician level.

This course is designed to articulate and progress seamlessly to the appropriate BSc (Hons) degree.

