

UNIVERSITY OF WOLVERHAMPTON

MSc Pharmaceutical Sciences

COURSE GUIDE 2012/13

[About this guide](#)

[Welcome](#)

[Attendance](#)

[The Wolverhampton Graduate](#)

[About the Course](#)

[Academic Regulations](#)

[Course information](#)

[Course Structure](#)

University Academic Calendar 2012/13

[Course Management](#) and [Staff Involved with the Course](#)

[Where to Get Help with your Course](#)

[Employability & Your Personal Development Portfolio \(PDP\)](#)

[Health and Safety Issues](#)

[Progression for Further Study](#)

[Career Opportunities](#)

[School Charter for Students](#)

[Academic Misconduct](#)

About this guide

This Course Guide will help you plan your course. It tells you which modules you must study and pass, and lists the optional ones which contribute to your award. The Guide also offers you brief descriptions of each module, including general information about assessment tasks, and an overview of how the Course can be used for future career choices.

You should read this Course Guide in conjunction with the [Undergraduate Student Guide: the University's Policies and Regulations](#) and/or [Postgraduate Student Guide](#). These documents should provide you with all the basic information that we think you will need for your period of study here.

You are encouraged to read this Guide through now. It will be a considerable advantage to you to be familiar from the outset with the various aspects of your studies that are described. It may be that the relevance of some of the sections will not be immediately obvious. Keep it somewhere accessible, so that you can refer to it as needed. The answers to many of the questions that you will want to ask are contained in it.

Obviously even in a document like this we have not covered every query and problem that you might have about the course. If you find that there is something you need to know, please check on [SAS Student Support Portal in WOLF](#) or contact the SAS Student Support Office (details below). You can also consult the University's [Student Services Gateway](#) as appropriate. We are pleased to hear your views and welcome suggestions for ways of improving the operation of the Course.

Please enter the contact details for your Personal Tutor for your future reference:	----- <i>The name of your Personal Tutor will be given to you at the beginning of your course and can be checked via e:Vision</i>
Your School Student Support Office is:	Student Support Office Room: MA104 Tel : 01902 322129 Email: sasstudentsupport@wlv.ac.uk
Your local <i>HERE 2 HELP</i> is:	Ground floor MD Building, City Campus (South) Tel: 01902 322487 Fax:01902 322185

Please note that in order to develop and improve the Course, it may be necessary on occasions to amend or revise the details given in this Course Guide.

Welcome

On behalf of the Course Management Team I should like to extend to you a very warm welcome and I would like to take this opportunity to wish you every success in your studies at the University of Wolverhampton, and trust that your time at the University of Wolverhampton will prove to be enjoyable, stimulating and rewarding.

MSc Pharmaceutical Sciences is one of many run by the School of Applied Sciences which has established an excellent reputation for the quality of its courses, for an innovative approach to teaching and learning, and for the friendliness of its staff.

We believe it is important that you are encouraged to make your own contribution to the effective operation and development of your chosen course. We are, therefore, keen to hear your views and would welcome any suggestions that you may have about ways of improving any aspect of your course and/or the student experience here at the University. In practice, you will have the opportunity to do this through our 'student voice' processes, such as student forums.

Remember that the outcome of your studies could affect the whole of your future career and therefore study should certainly be your first priority. In resolving to work hard however, do not forget to have time for recreation and social activities. Do take full advantage of the [University facilities](#) at your disposal.

Dr Colin Brown

C.A.Brown@wlv.ac.uk

Attendance

The University recognises that you have made a significant investment in both time and money in choosing to study for a degree. Staff are committed to helping you fulfil your potential. Your attendance at, and participation, in classes is a key factor in ensuring that you do so.

Attendance will help you to:

- Understand the subject area you are studying;
- Acquire and develop the skills and knowledge needed to ensure success;
- Prepare for and undertake assessments;
- Learn from and with your fellow students;
- Receive feedback from teaching;
- Participate in practical and group work;
- Develop your communication skills.

If you are unable to attend a class please let your tutor know that you are unable to do so. He/she will then be able to give you advice on what was covered in the class, and what you need to do to catch up. Please do remember how important attendance is to your success.

The University considers this to be so important that it reserves the right to review the position of students who fail to attend.

The Wolverhampton Graduate

By the end of your course, the university expects you to be a Wolverhampton Graduate who is knowledgeable and enterprising, digitally literate and a global citizen.

Digitally Literate

Our graduates will be confident users of advanced technologies; they will lead others, challenging convention by exploiting the rich sources of connectivity digital working allows.

Knowledgeable and Enterprising

Our graduates will know how to critique, analyse and then apply knowledge they acquire in an enterprising way.

Global citizens

Our graduates will bring an informed understanding of their place and ethical responsibilities in the world.

Further information can be found on the University student webpage for [Graduate Attributes](#).

About the Course

This Guide outlines the modules which are available, teaching and learning activities and assessment tasks. If there is anything you need to discuss further, please contact Dr Colin Brown, Senior Lecturer in Pharmacology and Programme Leader.

The educational aims of the course are:

The MSc programmes in Pharmaceutical Sciences have been developed to support a number of key areas within the pharmaceutical industry, such as pharmaceutical technology, drug discovery and the development of 'Qualified Persons' (QP). In particular the programmes have been specifically designed to provide you with:-

- A knowledge base relevant to the modern pharmaceutical Industry
- The skills to enable you to make informed decisions in key areas of the pharmaceutical industry.
- The skills to enable you design implement and critically evaluate scientific investigation in the area of pharmaceutical sciences.

The course learning outcomes are:

1. synthesise and interpret new knowledge
2. Critically evaluate scientific data
3. Design, implement and evaluate scientific research
4. Effectively use information technology and be able to apply it in the area of pharmaceutical sciences.
5. Present scientific data/information in a clear, logical and concise manner.

These will be achieved through the following learning activities:

Traditional lectures, seminars, tutorials, laboratory sessions and workshops, the programme will also employ other activities such as group discussions, literature evaluation and self-managed enquiry.

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.

Academic Regulations

This course adheres to the University's academic regulations. A full version of these regulations can be found on the University web page [for Policies and Regulations](#). These regulations govern your course and will be binding on you. It is, therefore, important that you read and become familiar with them.

Course information

The course provides a number of optional routes, leading to a named award in Pharmaceutical Science, appropriate for students already in, or planning a career in the Pharmaceutical Sciences profession. The route options are:

- Drug Design and Discovery
- Pharmaceutical Analysis
- Pharmaceutical Manufacturing,
- Pharmacological Sciences and
- Pharmaceutical Quality Assurance

The course will provide you with a thorough grounding in the basic principles of Pharmaceutical Science and will equip you with the skills necessary for successful postgraduate study. Specialist modules offer you the opportunity to gain knowledge in key and emerging areas of Pharmaceutical Science, such as drug discovery, pharmaceutical manufacturing and pharmaceutical legislation and quality assurance.

Course Structure for Postgraduate courses

PG Regulations
Students will study:
Standard Full-time: modules worth 180 credits (a full masters course may be completed over one calendar year), taught over the 4 Postgraduate Blocks.

Full-time structure: MSc in Drug Discovery and Design

Block 1	Block 2	Block 3	Block 4
7PY011	7PY009	7PY015	
7PY003	7PY014	7PY017	
	7PY007		

Full-time structure: MSc in Pharmaceutical analysis

Block 1	Block 2	Block 3	Block 4
7PY011	7PY009	7PY016	
7PY003	7PY004	7PY012	
	7PY007		

Full-time structure: MSc in Pharmaceutical Manufacturing

Block 1	Block 2	Block 3	Block 4
7PY011	7PY009	7PY016	
7PY003	7PY008	7PY012	
	7PY007		

Full-time structure: MSc in Pharmacological Sciences

Block 1	Block 2	Block 3	Block 4
7PY011	7PY009	7PY010	
7PY003	7PY014	7PY013	
	7PY007		

Full-time structure: MSc in Pharmaceutical Quality Assurance

Block 1	Block 2	Block 3	Block 4
7PY011	7IB002	7PY017	
7PY003	7PY008	7PY012	
	7PY007		

Core (C) or Option (O)*	Module Code	Module title	Credits
C	7PY011	Research Methods and Skills	20
C	7PY003	Pharmaceutical	20
C	7PY009	Sources of Drugs and Drug Actions	20
C	7PY007	Research Project	60
O	7PY014	Strategies and	20

		Methods in Drug Discovery, Design and Development	
O	7PY015	Natural Products and Medicinal Chemistry	20
O	7PY017	Formulation Science	20
O	7PY004	Pharmaceutical Quality Control	20
O	7PY016	Biopharmaceutics	20
O	7PY012	Pharmaceutical Manufacturing Process	20
O	7PY010	Molecular Pharmacology	20
O	7PY013	Pharmacoepidemiology	20
O	7PY008	Pharmaceutical Quality Assurance	20

University Academic Calendar 2012/13

[University Academic Calendar.](#)

Course Management and Staff Involved with the Course

The Head of Department is Professor Rae Morgan

The Course Leader is Dr Colin Brown

A Personal Tutor will also be assigned to you during welcome week. This person will remain your tutor until graduation. This tutor will normally be a member of the course team.

The course team consists of:

Prof Rae Morgan (Professor of Pharmacy education)
 Prof Ray Fitzpatrick (Professor of Clinical Pharmacy Practice)
 Prof John Howl (Professor in Molecular Pharmacology)
 Prof Satya Sarker (Professor of Pharmacy)

Dr Edward John Mole (Principal Lecturer in Pharmaceutical Chemistry)
 Dr Iain Coleman (Principal Lecturer in Pharmacology and Pharmaceutical Science)
 Dr Colin Brown (Senior Lecturer in Pharmacology and Course Leader)
 Dr Steve Anderson (Senior Lecturer in Pharmacology)
 Dr Chris Perry (Senior Lecturer in Pharmaceutical Chemistry)
 Dr Ken Kenward (Senior Lecturer in Pharmaceutical Microbiology)
 Dr Daron Fincham (Senior Lecturer in Biochemistry)
 Dr Claire Martin (Senior Lecturer in Pharmaceutics)
 Dr Steve Safrany (Senior Lecturer in Pharmacology)
 Dr James Tang (Senior Lecturer in Pharmaceutics)
 Mr Abhishek Gupta (Junior Lecturer/Demonstrator in Pharmaceutical Science)
 Miss Laura Harvey-Vallender (Junior Lecturer/Demonstrator in Pharmaceutical Science/Pharmacology)
 Mr Adam Watts (Junior Lecturer/Demonstrator in Pharmacology and Biomedical Sciences)

Where to get help with your course

If you find that there is something you need to know, please check on [SAS Student Support Portal in WOLF](#) or contact the SAS Student Support Office in room MA104, Tel: 01902 322129 or Email: sasstudentsupport@wlv.ac.uk.

Student Support

If you encounter any issues (personal or academic) the following diagram directs you to the appropriate department or staff member.



Employability & Your Personal Development Portfolio (PDP)

What is 'Employability'?

'Employability' is concerned with the development of skills aimed at enhancing your employment prospects throughout your time here at the University of Wolverhampton. Developing specialist subject and academic knowledge is important for employers but they also want to employ individuals who are able to:

- Communicate effectively,
- Work in a team and have good interpersonal skills.
- Solve problems
- Work on their own using their own initiative and are able to adapt to changing situations
- Be self-confident

How Will You Develop Your Employment Skills?

At the School of Applied Sciences we aim to provide you with the opportunity to develop these through the modules you will be studying. The assessments you do for your modules are designed to help you develop Subject specific skills through the research you undertake for the assignments. In addition, they are also designed to help you develop other key skills such as your written communication skills. Where you have formal presentations, this will build your self-confidence in addition to helping you develop your skills of verbal communication. Working as part of a team will develop vital group-work skills. Attending your classes regularly will further ensure that you have the opportunity to develop other skills.

Throughout your time at the University, you will develop and be able to demonstrate a number of skills, some of which are listed below:

- Working as part of a group
- Demonstrating teamwork skills and leadership skills
- Effective communication
- Written (via reports etc.)
- Oral (through formal presentations)
- Problem-solving
- IT skills (which include use of basic packages for word processing, spreadsheets, use of email etc.)
- Time management – attending classes, handing in of assignments, planning study time

You may also be working part-time. The experience you gain within a work environment is a very worthwhile one and also helps you to develop transferable skills which are valued by employers.

Career opportunities

The MSc Pharmaceutical Science courses are attractive if you are seeking an academic research career and/or wish to make yourself highly employable as a pharmaceutical scientist, enabling you to specialize in key areas such as drug discovery, pharmaceutical analysis and quality control and pharmaceutical quality audit.

School Charter for Students

The University is a community of learning; each and every member, be they staff or students, have responsibilities to that community as well as to themselves. All students of the university have the right to study in an environment that promotes success. This means that no one should be distracted by the inconsiderate behaviour of others; for example by people who arrive late, or talk in lectures or the learning centre.

In order to help you achieve your objectives with us, we will strive to provide:

- Effective impartial advice and guidance
- An effective introduction to the University, the School of Applied Sciences and your chosen course
- A welcoming environment with quiet places to study
- Appropriate resources including books and computing resources
- Qualified and professional tutors and staff
- Stimulating and well planned learning opportunities
- Well-defined and appropriate programmes of study
- Opportunities to plan and review progress with tutors and student support workers
- Access to learning support
- Access to confidential counselling and careers advice

We will aim to ensure that

- Timely and appropriate feedback will be provided on assessments
- You have a personal tutor
- You can book an appointment with your tutor using the on-line booking system
- You will have access to the information you need to progress on your course e.g. each module you study will be accompanied by a module guide, similarly your award/pathway will have a guide or handbook

You will find information about all of the above in your Pathway Guide or Award Handbook, or from your tutor or from the web.

The University expects and needs you to:

- Make regular use of the electronic systems provided for your use e.g. E-Mail, E-Vision, Wolf and the student appointments system If you do not make use of these resources you cannot perform well.
- Attend regularly and punctually, this means for example, that you should not enter a teaching room after the session has started or miss appointments you have made to see staff.
- Given in all your assessments on time (or they will not be marked)
- Show courtesy and respect to staff and other students, this means for example, that cell phones should be turned off in all teaching sessions.
- Ensure that you understand the requirements of your award/pathway
- Ensure that you are aware of the requirements of each module you are studying and are aware which sessions to attend and what the assessment procedures are
- Respect and abide by University Regulations, e.g. Equal Opportunities Policy, ID Cards, quiet areas.
- Bring all the personal equipment that you require to classes/workshops
- Show consideration to others by listening attentively and participating in class activities
- Keep your tutor informed if you have personal problems that affect your work; if these problems make it necessary to seek extensions, to do so before the deadline
- Identify for yourself what constitutes academic misconduct such as plagiarism and make every effort to avoid it. (See <http://www.wlv.ac.uk/polsregs> for definitions and help)
- Use the student support office (Room MA104) to get quick answers to your queries without hunting for a lecturer.
- Seek approval for and confirm any change of programme within the deadlines
- Inform the University when your address or other contact details change
- Follow Health and Safety guidelines in laboratory and fieldwork settings.
- Behave appropriately as an ambassador for the University when working off campus.

Academic Misconduct

The University considers seriously all acts of academic misconduct, which by definition are dishonest and in direct opposition to the values of a learning community. Academic misconduct, if not challenged, will ultimately devalue academic standards and honest effort on the part of students.

Defining Academic Misconduct

Cheating

Cheating is defined as any attempt to gain unfair advantage in an assessment by dishonest means, and includes, for example, all breaches of examination room rules, impersonating another student, falsifying data, and obtaining an examination paper in advance of its authorised release.

This is not an exhaustive list and other common examples of cheating would include –

- Being in possession of “crib notes” during an examination
- Copying from the work of another student
- Prohibited communication during an examination
- Acts of plagiarism or collusion as defined below

Collusion

Collusion is when two or more people combine to produce a piece of work for assessment that is passed off as the work of one student alone. The work may be so alike in content, wording and structure that the similarity goes beyond what might have been coincidence. For example – where one student has copied the work of another, or where a joint effort has taken place in producing what should have been an individual effort.

Collusion should not be confused with the normal situation in which students learn from one another, sharing ideas and group work to complete assignments (where this is specifically authorised).

Plagiarism

Plagiarism is the act of taking someone else’s work and passing it off as your own. This includes incorporating either unattributed direct quotation(s) or substantial paraphrasing from the work of another/others. It is important to cite all sources whose work has been drawn on and reference them fully in accordance with the referencing standard used in each academic school.

The most common forms of plagiarism are –

- Cut or copied and pasted materials from websites
- Copying the work of another student (past or present) including essays available through “essay bank” websites – or other data.
- Copying material from a text book or journal

Students may go to great lengths to disguise the source reference they have been consulting in contributing to an assignment – without understanding that with proper referencing this is entirely acceptable.

Support for Students

The University, through its academic staff, will be both sympathetic and supportive in preventing plagiarism and other forms of academic misconduct.

A variety of support mechanisms are in place to help students succeed and avoid academic misconduct.

- Visit our study skills support website at www.wlv.ac.uk/skills See the section on tackling academic misconduct.
- Download the Students' Union guide to Avoiding Academic Misconduct ("Read, Write, Pass") - available from the same webpages.
- Book an appointment to see a study skills adviser - through the Learning Centres.
- Speak to your personal tutor or module leader.
- There is help available if you need it. The University caught and prosecuted 500 cases of Academic Misconduct last year - it is better to do the work than think you can get away with cheating - the penalties are severe...

Penalties

Where an offence is admitted, or a panel decides that cheating, plagiarism or collusion has occurred, a penalty will be imposed. The severity of the penalty will vary according to the nature of the offence and the level of study. Penalties will range from failure of the assignment under investigation to a restriction of the award a student may ultimately achieve or a requirement to leave the University.

Full details about the University's policy on Academic Misconduct and regulations and procedures for the investigation of academic misconduct are available at our website: www.wlv.ac.uk/polsregs