

# PROGRAMME SPECIFICATION

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## Master of Pharmacy in Pharmacy

<b>Awarding institution</b>	Liverpool John Moores University
<b>Teaching institution</b>	Liverpool John Moores University
<b>UCAS Code</b>	B201
<b>JACS Code</b>	B230
<b>Programme Duration</b>	Full-Time: 4 Years
<b>Language of Programme</b>	All LJMU programmes are delivered and assessed in English
<b>Subject benchmark statement</b>	GPhC Standards for Pharmacy Education QAA Pharmacy Subject Benchmark Statement
<b>Programme accredited by</b>	The General Pharmaceutical Council (GPhC)
<b>Description of accreditation</b>	<a href="http://www.pharmacyregulation.org/">http://www.pharmacyregulation.org/</a>
<b>Validated target and alternative exit awards</b>	Master of Pharmacy in Pharmacy
<b>Programme Leader</b>	Neil Henney

## Educational aims of the programme

To inculcate an appreciation of pharmacy as a patient centred discipline and an understanding of the role of the pharmacist in a variety of professional settings.

To provide knowledge of the chemical, physical and biological sciences appropriate to professional practice in pharmacy or generally in the pharmaceutical industries, research or education.

To provide knowledge of legal and administrative arrangements, codes of practice and ethics and develop practical skills relevant to the profession of pharmacy.

To facilitate the development of an ability to apply knowledge of basic scientific principles and/or legal and administrative arrangements to the solution of practical problems in a clinical setting and in industry and the pharmaceutical sciences.

To provide knowledge of the planning and execution of research and the analysis of results obtained and to encourage a critical approach to published research leading to evidence-based decision-making skills.

To facilitate the development of problem solving skills.

To facilitate the development of an ability to work both independently and as a team member.

To facilitate the development of all forms of communication skills.

To prepare students for life-long learning and continuing professional development.

To prepare students for entry into the pre-registration training required for registration by the GPhC.

To encourage students to fully engage with the Career Smart programme

## Target award Learning Outcomes - Master of Pharmacy

*A student successfully completing the programme of study will have acquired the following subject knowledge and understanding as well as skills and other attributes.*

*A student who is eligible for this award will be able to:*

1. Explain aspects of chemistry relevant to the structure, isolation, purification, synthesis, chemical reactivity and biological activity of drugs, biotechnology, the quality control of medicinal products and the quantification of drugs in medicines and biological fluids.
2. Explain the relevance of physical chemistry including chemical kinetics and drug stability.
3. Explain all stages of drug development, assessment of safety, efficacy and cost-effectiveness marketing.
4. Explain the formulation and manufacture of medicinal products including sterile products, general and

microbiological quality control and packaging and labelling.

5. Demonstrate how physiology, biochemistry, pathology, microbiology, genetics and nutrition leading to an understanding of disease processes and how drugs are used to prevent, ameliorate or cure such conditions.
6. Demonstrate how the processes by which drugs are absorbed into, distributed around and eliminated from the body.
7. Explain and identify adverse drug reactions and drug interactions.
8. Explain the law and ethics as relevant to the supply of medicines and administrative arrangements within the NHS.
9. Explain social and behavioural sciences as relevant to pharmacy practice.
10. Explain the relevant health policy and pharmaco-economics.
11. Explain the types and relevance of complementary therapies.
12. Explain the drug and substance abuse and the relevant issues.
13. Demonstrate the ability to arrive at an understanding of complex issues which require the assembly, assimilation, critical analysis and synthesis of a wide range of information.
14. Demonstrate creativity in the production of solutions to complex problems, especially in the practice setting.
15. Demonstrate the design and assessment of research and analysis of data.
16. Conduct standard laboratory procedures and operate instruments likely to be met in the practice setting or laboratory.
17. Safely handle potentially dangerous materials and assess risks.
18. Store and supply medicines applying pharmaceutical knowledge and in accordance with legal and administrative requirements and ethics.
19. Accurately perform pharmaceutical calculations and use units appropriately.
20. Apply pharmaceutical principles and clinical governance to the formulation, preparation and packaging of products dispensed (including those prepared extemporaneously).
21. Recognise common disease states and respond appropriately.
22. Advise patients and other health care professionals on the use of medicines.
23. Report adverse reactions to medicinal products.
24. Perform diagnostic testing, health screening and engage in health promotion.
25. Manage themselves in accordance with the GPhC's Code of Conduct for Pharmacy Students.
26. Demonstrate library skills - information retrieval from primary and secondary sources.
27. Demonstrate the use of information and communications technology including word processing, the use of spread sheets and online information searching.
28. Demonstrate the effective dissemination of information in oral and written form to a specialist or lay audience.
29. Demonstrate ability to work effectively either independently or as a member of a team Self-motivation, planning strategies and efficient time management.
30. Demonstrate the capacity for independent learning that will be required for continuing professional development.

## Teaching, Learning and Assessment

*The methods used to enable outcomes to be achieved and demonstrated are as follows:*

Learning is facilitated by a variety of methods. These include lectures, practicals, workshops, tutorials, computer aided learning and directed independent study.

A variety of assessment methods are used, these include competencies, coursework and examination. Coursework will consist of reports, posters and presentations relating to theoretical and practice-based topics, case-studies or laboratory exercises. Formative assessment and feedback will be provided for all types of assessment. Examinations will be based on multiple choice questions and extended multiple items to mirror the GPhC pre-registration examinations.

Tutorials, workshops, practice-based activities (interprofessional learning, simulations, patient-student engagement), individual report production, group assignments, library projects, professional learning days, throughout the programme and a research project undertaken at Level 7.

Performance in workshops, tutorials and group assignments is assessed by tutor and may also be subject to

peer group assessment. Research projects are assessed by seminars, poster production and written reports and for group research, peer assessment will also be used.

Lectures, dispensing exercises within the school's own dispensary and clinical suites, workshops, tutorials, directed independent study and periods of professional placement in community and hospital pharmacies.

Written examinations, practical dispensing tests, Objective Structured Laboratory Assessments (OSLAs) and Objective Structured Clinical Examinations (OSCEs).

Effective work and study practices are introduced in lectures and workshops and embedded into Level 4 module. Computer literacy is embedded within all modules at all levels of the programme. Development of skills in the dissemination of information is facilitated by the preparation and presentation of seminars and the production of written reports. At all levels, group projects, reports and practical exercises necessitate group working. A large element of independent private study is embedded within each module.

A portfolio is required to be submitted at each level of the programme and will require students to demonstrate the acquisition of a full range of key skills. Reports, seminars and posters are assessed at all levels to ensure adequate communication skills.

## **Programme structure - programme rules and modules**

The programme is offered as a 4 year programme of full time study only. It is organised as 4 levels of study each corresponding to one year of the programme. The programme is based on a two semester academic year. A total of 480 credits is required for the award of an MPharm degree and the credits are divided equally between the 4 levels of study. Each level has one 120 credit module. Credits are designated to each module and are awarded for the achievement of the learning outcomes of the module. Degree classification is based on 60% of level 7 credit plus 30% of level 6 credit plus 10% of level 5 credit. The programme of each individual student is detailed in their transcript.

### Level 7

7100IMPHAR Advancing patient-centred care

Competencies required (4):

Calculations Pass/Fail up to 5 opportunities

Objective Structured Clinical Examination 1 Pass/Fail up to 3 opportunities

Objective Structured Clinical Examination 2 Pass/Fail up to 3 opportunities

Portfolio and Personal and Professional Development Plan Pass/Fail up to 2 opportunities

### Level 6

6000IMPHAR Complexities of healthcare

Competencies required (6):

Calculations Pass/Fail up to 5 opportunities

Pharmacy Law Pass/Fail up to 3 opportunities

Dispensing practical examination Pass/Fail up to 3 opportunities

Objective Structured Clinical Examination Pass/Fail up to 3 opportunities

Objective Structured Laboratory Assessment Pass/Fail up to 3 opportunities

Portfolio and Personal and Professional Development Plan Pass/Fail up to 2 opportunities

### Level 5

5000IMPHAR Medicines, patients and the pharmacist

Competencies required (6):

Calculations Pass/Fail up to 5 opportunities

Pharmacy Law Pass/Fail up to 3 opportunities

Dispensing practical examination Pass/Fail up to 3 opportunities

Objective Structured Clinical Examination Pass/Fail up to 3 opportunities

Objective Structured Laboratory Assessment Pass/Fail up to 3 opportunities

Portfolio and Personal and Professional Development Plan Pass/Fail up to 2 opportunities

### Level 4

4000IMPHAR Integrated Foundations of Pharmacy

Competencies required (6):

Calculations Pass/Fail up to 5 opportunities

Pharmacy Law Pass/Fail up to 3 opportunities

Dispensing practical examination Pass/Fail up to 3 opportunities

Objective Structured Clinical Examination Pass/Fail up to 3 opportunities

Objective Structured Laboratory Assessment Pass/Fail up to 3 opportunities

Portfolio and Personal and Professional Development Plan Pass/Fail up to 2 opportunities

Students who successfully complete 120 credits at Level 4 but who do not continue on the MPharm programme will be transferred to the alternative exit award of Certificate of Higher Education Pharmaceutical Studies.

Students who successfully complete 240 credits at Levels 4 and 5 but who do not continue on the MPharm programme will be transferred to the alternative exit award of Diploma of Higher Education Pharmaceutical Studies.

Students who successfully complete 360 credits at Levels 4, 5 and 6 but who do not continue on the MPharm programme will be transferred to the alternative exit award of BSc (Hons) Pharmaceutical Studies.

Option: additional study year abroad following Level 5

The programme will offer the opportunity of an additional study year abroad following Level 5. Students will be enrolled on a 600 credit integrated masters with study abroad programme. Of those 600 credits, 120 will be taken via a

Level 5 study abroad module [5002IMPHAR Study Year abroad]. The modules to be studied in the host institution must be agreed in advance. The Level 5 mean for the final award mark will be calculated based upon the 240 credits at Level 5.

Level 7	Potential Awards on completion	Master of Pharmacy
Core	Option	Award Requirements
7100IMPHAR ADVANCING PATIENT-CENTRED CARE (120 credits)		120 core credits at level 7 0 option credits at level 7
Level 6	Potential Awards on completion	
Core	Option	Award Requirements
6000IMPHAR COMPLEXITIES OF HEALTHCARE (120 credits)		120 core credits at level 6 0 option credits at level 6
Level 5	Potential Awards on completion	
Core	Option	Award Requirements
5000IMPHAR MEDICINES, PATIENTS AND THE PHARMACIST (120 credits)		120 core credits at level 5 0 option credits at level 5
Level 4	Potential Awards on completion	
Core	Option	Award Requirements
4000IMPHAR INTEGRATED FOUNDATIONS OF PHARMACY (120 credits)		120 core credits at level 4 0 option credits at level 4

## Information about assessment regulations

All programmes leading to LJMU awards operate within the University's Academic Framework.  
<https://www.ljmu.ac.uk/about-us/public-information/academic-quality-and-regulations/academic-framework>

This programme has the following variances to the Academic Framework, approved by Education Committee in June 2018:

1. A module size of 120 credits is permitted at levels 4-7

This requirement relates to the framework for Pharmacy education and integrated nature of the programme.  
(GPhC standard 5.1, 5.5a)

## 2. Component marking

- A pass mark must be achieved in each validated component of a module
- No trailing of modules or module components is permitted. All components must be passed and all competencies must be satisfied to pass a module.

This is a requirement of the GPhC (GPhC standards – 5.9, 5.10, 5.11)

The aim is that students are treated in a similar manner to students with a more normal modular structure, and that the effects of failure are not unusually harsh.

## 3. Referrals in individual assessments

Failure in an individual assessment component at the first attempt will result in the student being referred in that component rather than the entire module

Referrals may be offered “in year” following a formal Board of Examiners in order to facilitate progression.

Referral in an individual component (Exam/coursework) will result in the mark for the referred component being capped at the pass mark rather than the overall module mark being capped at the pass mark

If after these referrals have been completed a student has not passed all components (Exam/coursework), an exceptional second referral(s) will be offered by the Board of Examiners if:

The student has passed components that contribute at least 80% of the module mark.

The total of the components considered for exceptional second referral at any one level of the programme does not contribute more than 20% to the module mark. The student has attempted all the relevant referral opportunities.

Students will normally be permitted an exceptional opportunity in ONE competency provided all other competencies within level have been passed.

4. The penalty for AMP2 and AMP3 tariffs should be the same as AMP1 – namely Zero for assessment component

## 5. Final Award Calculation

To permit the use of the weighted assessment component marks at L7 rather than the overall module mark in the calculation of the award mark and consideration of borderline students.

## **Opportunities for work-related learning ( location and nature of activities)**

### 4000IMPHAR

Half day (each) in hospital and community pharmacy - information gathering

Student-patient engagement 1.5 hours

### 5000IMPHAR

One day community pharmacy visit

Student-patient engagement 2 hours

Interprofessional learning - exploring professional role with medical students

### 6000IMPHAR

1 x full day hospital ward visits

1 x full day community nurse visits

Transferring patient safety exercise facilitated through tutorials with a pharmacist

### 7100IMPHAR

Pharmacy placements at local NHS Trusts with teacher-practitioner pharmacists.

Inter-professional and cross-disciplinary learning opportunities.

At all levels

Students are strongly encouraged to find at least 1 week of work experience in hospital and 1 week in community pharmacy during own time.

Large proportions of all modules are directly relevant to the work of a Pharmacist and are delivered in a manner that closely simulates real working conditions or real-life problems/tasks.

## Criteria for admission

### A/AS Level

UCAS Tariff Points Required: 120 pts

Tariff points may differ for International Baccalaureate qualifications.

A Levels:

Minimum number of A Levels required: 3

Subject specific requirements: A2 Chemistry and minimum AS Biology

General Studies is not acceptable

AS level awards are acceptable only when combined with other qualifications

AS Double Award: Acceptable only when combined with other qualifications

All applicants are advised to study at least 2 sciences at A2

GCSE and Equivalents

GCSE/Standard grades required: At least Grade 4 (or equivalent) in English and Maths . Grade 4 (or equivalent) or above in all sciences studied.

### BTEC National Diploma

BTEC Extended Diploma (QCF) Certificate - Acceptable only when combined with other qualifications. BTEC's acceptable only with an A2 Chemistry grade B, and AS Biology grade C

### Irish Leaving Certificate

Irish Leaving Certificate - acceptable when combined with other qualifications. Grades/subjects required: 300-320 in relevant discipline Chemistry and preferably Biology (at higher level)

### Scottish Higher

Advanced Higher: Acceptable on its own and combined with other qualifications. Additional information: 300-320 points Chemistry must be included.

### International Baccalaureate

International Baccalaureate - Acceptable on its own and combined with other qualifications Minimum 26. Grade 6 in Chemistry and Biology (higher level).

Welsh Baccalaureate Advanced Diploma acceptable only when combined with other qualifications. Advanced Diploma grades/subjects required 120 points (Grade A).

### Access

Relevant subject including Distinctions in units involving Chemistry and another Science, preferably Biology.

### Other

The transfer of students studying MPharm at another UK School of Pharmacy will be considered only in exceptional circumstances and only when successful at all relevant modules. Such transfers can only be agreed between the respective Heads of School. Graduates with a minimum of a 2.1 will be considered for admission to the MPharm programme. Transfer of students from other programmes of study, for example Pharmaceutical science students will only be possible if the above entrance criteria are met. LJMU Pharmaceutical science students must attain a minimum of 60% overall at level 4 (selected modules). Fitness to Practise requirements must be also be attained.

Due to the integrated nature of the MPharm programme, no recognition of prior learning will be permitted for entry. Students are only able to enter the MPharm programme at Level 4. This applies to those entering Higher Education (HE) for the first time and those individuals who have successfully completed in whole or in part a degree programmes from LJMU or other HE Institutions.

### Overseas qualifications

International students are required have IELTS 7.0 with a minimum of 6.5 in all components (or recognised equivalent qualification) (see Standard 4.2b).

International students will be required to provide, in addition to the Fitness to Practice requirements noted above, the following:

- an overseas DBS as outlined in the UK Visa and Immigration website
- a Letter of Good Character

## External Quality Benchmarks

All programmes leading to LJMU awards have been designed and approved in accordance with the UK Quality Code for Higher Education, including the Framework for Higher Education Qualifications in the UK (FHEQ) and subject benchmark statements where applicable.

The University is subject to periodic review of its quality and standards by the Quality Assurance Agency (QAA). Published review reports are available on the QAA website at [www.qaa.ac.uk](http://www.qaa.ac.uk)

Programmes which are professionally accredited are reviewed by professional, statutory and regulatory bodies (PSRBs) and such programmes must meet the competencies/standards of those PSRBs.

## Support for students and their learning

The University aims to provide students with access to appropriate and timely information, support and guidance to ensure that they are able to benefit fully from their time at LJMU. All students are assigned a Personal Tutor to provide academic support and when necessary signpost students to the appropriate University support services.

Students are able to access a range of professional services including:

- Advice on practical aspects of study and how to use these opportunities to support and enhance their personal and academic development. This includes support for placements and careers guidance.
- Student Advice and Wellbeing Services provide students with advice, support and information, particularly in the areas of: student funding and financial matters, disability, advice and support to international students, study support, accommodation, health, wellbeing and counselling.
- Students studying for an LJMU award at a partner organisation will have access to local support services

## Methods for evaluating and improving the quality and standards of teaching and learning

### Student Feedback and Evaluation

The University uses the results of student feedback from internal and external student surveys (such as module evaluations, the NSS and PTES), module evaluation questionnaires and meetings with student representatives to improve the quality of programmes.

### Staff development

The quality of teaching is assured through staff review and staff development in learning, teaching and assessment.

### Internal Review

All programmes are reviewed annually and periodically, informed by a range of data and feedback, to ensure quality and standards of programmes and to make improvements to programmes.

### External Examining

External examiners are appointed to programmes to assess whether:

- the University is maintaining the threshold academic standards set for awards in accordance with the FHEQ and applicable subject benchmark statements
- the assessment process measures student achievement rigorously and fairly against the intended outcomes of the programme(s) and is conducted in line with University policies and regulations
- the academic standards are comparable with those in other UK higher education institutions of which external examiners have experience
- the achievement of students are comparable with those in other UK higher education institutions of which the external examiners have experience

and to provide informative comment and recommendations on:

- good practice and innovation relating to learning, teaching and assessment observed by external examiners
- opportunities to enhance the quality of the learning opportunities provided to students

### **Please note:**

*This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full*

*advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content, teaching, learning and assessment methods of each module can be found in module and programme guides.*