



University of Brighton

PROGRAMME SPECIFICATION

PART 1: COURSE SUMMARY INFORMATION

Course summary		
Final award	MPharm (Hons), Master of Pharmacy with Honours	
Intermediate award	Bachelor of Science in Pharmaceutical Studies with Honours Bachelor of Science in Pharmaceutical Studies Diploma of Higher Education (in Science) Certificate of Higher Education (in Science)	
Course status	Validated	
Awarding body	University of Brighton	
School	Pharmacy and Biomolecular Sciences	
Location of study/ campus	Moulsecoomb	
Partner institution(s)		
Name of institution	Host department	Course status
1.		SELECT
2.		
3.		
Admissions		
Admissions agency	UCAS	
Entry requirements <i>Include any progression opportunities into the course.</i>	<p><i>Check the University's website for current entry requirements.</i></p> <p>The normal minimum entrance requirements to the course are:</p> <ul style="list-style-type: none"> GCSE passes in both mathematics (grade B) and English Language (Grade B). <p>Common alternative English language qualifications are IELTS (an overall score of 7.0 with no component lower than 6). Other equivalent English Language qualifications will also be considered.</p> <ul style="list-style-type: none"> Passes in three subjects at GCE Advanced Level (or two A-levels plus two AS passes) which must include A-level chemistry and preferably two more from the following: <ol style="list-style-type: none"> a biological science, a mathematical science, physics, an appropriate alternative science. 	

	<p>The preferred option is chemistry, biology and mathematics. Normally the minimum requirements at Advanced level are ABB - BBB with a minimum grade B in chemistry at A-level. A pass in biology or double science at GCSE will be required if Biology is not offered at Advanced level.</p> <ul style="list-style-type: none"> • The International Baccalaureate provided that the diploma is awarded with a total of not less than 32 points which should normally include 5 points from both chemistry and biology at the higher level. • Qualifications equivalent to the above that are also commonly accepted include Scottish Highers/Advanced Highers, Irish Leaving Certificate and Greek Apolyterion. • BTEC Extended Diploma: DDD plus a full A-level Chemistry at grade B • Access to HE Diploma pass with 60 credits overall. Must include 24 credits in biology and chemistry. At least 45 credits at level 3, with 30 credits at distinction. • Suitable applicants will normally be interviewed and will be required to undertake an online aptitude test, the result of which will inform the admissions process. <p>Admission to the course is subject to satisfactory completion of a Fitness to Practise declaration prior to entry.</p>		
Start date	Sep-18		
Mode of study			
Mode of study	Duration of study (standard)	Maximum registration period	
Full-time	4 years	10 years	
Part-time	Select	Select	
Sandwich	Select	Select	
Distance	Select	Select	
Course codes/categories			
UCAS code	B230		
Contacts			
Course Leader (or Course Development Leader)	Dr P.K. Chatterjee		
Admissions Tutor	Dr M.J. Ingram		
Examination and Assessment			
External Examiner(s)	Name	Place of work	Date tenure expires
	Dr J. Patel	King's College London	September 2019
	Dr K. Holden Dr C. Martin	University of Sunderland University of Worcester	TBA September 2021
Examination Board(s) (AEB/CEB)	AEB: Pharmacy AEB: Chemistry and Pharmaceutical Sciences CEB: Pharmacy		
Approval and review			
	Approval date	Review date	
Validation	July 2003 ¹	September 2017 ²	

¹ Date of original validation.

² Date of most recent periodic review (normally academic year of validation + 5 years).

Programme Specification	May 2018	September 2019 ³
Professional, Statutory and Regulatory Body 1 (if applicable): General Pharmaceutical Council (GPhC)	May 2003	March 2018 ⁴
Professional, Statutory and Regulatory Body 2 (if applicable):		
Professional, Statutory and Regulatory Body 3 (if applicable):		

PART 2: COURSE DETAILS	
AIMS AND LEARNING OUTCOMES	
Aims	
The aims of the course are:	
<ul style="list-style-type: none"> • To provide students with the pharmaceutical knowledge, attitudes and skills to enable successful undertaking of a pre-registration training year and subsequently, pursuance of a career in any branch of pharmacy. • To encourage the development of critical thinking, integrative capabilities and problem-solving skills appropriate for a Master's degree. • To facilitate the development of personal, social, behavioural and communication skills for effective interaction with patients, colleagues and health care professionals. • To engender professional and ethical awareness, an understanding of the contribution that pharmacists can make to patient-focused health care and an appreciation of the need for continuing professional development. 	
Learning outcomes	
The outcomes of the main award provide information about how the primary aims are demonstrated by students following the course. These are mapped to external reference points where appropriate ⁵ .	
Knowledge and theory	<p>On successful completion of the course the graduate will be able to demonstrate:</p> <p>K1. sufficient academic and professional knowledge to interpret and evaluate prescriptions and other relevant and appropriate orders for drugs and medicines;</p> <p>K2. the ability to supply drugs and medicines in accordance with current legislation and codes of professional conduct and practice;</p> <p>K3. insight into the role of pharmacy in primary health care;</p> <p>K4. an in-depth understanding of, and ability to discuss critically, the scientific principles underlying the design, production, mechanisms of action and use of drugs and medicines;</p> <p>K5. the ability to differentiate between modifiable risk factors for health and to formulate appropriate means for client education and the promotion of healthy lifestyles;</p> <p>K6. the capability to interact with and question clients appropriately and to evaluate the symptoms of common diseases and provide relevant counselling on the use of medicines, both prescribed and non-prescribed; the ability to differentiate between minor illness and major conditions and the need to refer the latter;</p> <p>K7. an appreciation of the place of complementary and alternative therapies in modern healthcare;</p>

³ Date programme specification will be reviewed (normally approval date + 1 year). If programme specification is applicable to a particular cohort, please state here.

⁴ Date of most recent review by accrediting/ approving external body.

⁵ Please refer to *Course Development and Review Handbook* or QAA website for details.

	<p>K8. a knowledge of adverse drug reactions and medication errors and the ability to use this knowledge to manage their prevention, monitoring and reporting using appropriate systems;</p> <p>K9. the ability to appraise critically a patient's medication and formulate a Pharmaceutical Care Plan, suggesting, where necessary, alterations in dosage form/strength or therapy;</p> <p>K10. an ability to apply the principles of research methods used in the natural, clinical, physical and social sciences and to design appropriate experiments for conducting a research project;</p> <p>K11. an ability to apply critically the principles of quality and quality assurance mechanisms in appropriate aspects of scientific and professional activities.</p>
<p>Skills Includes intellectual skills (i.e. generic skills relating to academic study, problem solving, evaluation, research etc.) and professional/practical skills.</p>	<p>On successful completion of the course the graduate will be able to demonstrate:</p> <p>S1. competence in performing pharmaceutical calculations;</p> <p>S2. the ability to dispense medicines extemporaneously;</p> <p>S3. an ability to use information technology effectively to gather, integrate and communicate information relevant to pharmacy;</p> <p>S4. self-directed learning with reflective practice and the ability to adapt to changing requirements and expectations;</p> <p>S5. critical thinking, interpretative and problem-solving capabilities, sometimes in the absence of complete information;</p> <p>S6. an ability to discuss critically and respond appropriately to the social and ethical issues arising from the practice of pharmacy.</p>
<p>QAA subject benchmark statement (where applicable)⁶</p>	<p>Learning outcomes for all modules of the MPharm programme are informed by the QAA Subject Benchmark Statement for Pharmacy http://www.qaa.ac.uk/en/Publications/Documents/Subject-benchmark-statement--Pharmacy.pdf</p>

<p>PROFESSIONAL, STATUTORY AND REGULATORY BODIES (where applicable)</p>
<p>Where a course is accredited by a PSRB, full details of how the course meets external requirements, and what students are required to undertake, are included.</p>
<p>The programme is accredited by the regulator for pharmacy, the General Pharmaceutical Council (GPhC), and fulfils the requirements of the indicative syllabus for MPharm programmes by meeting the standards for 'Initial education and training for pharmacists' https://www.pharmacyregulation.org/initial-training</p> <p>Successful completion of the course is recognised by the GPhC, as qualification to enter the pre-registration training programme which is also administered by the GPhC.</p>

<p>LEARNING AND TEACHING</p>
<p>Learning and teaching methods</p> <p>This section sets out the primary learning and teaching methods, including total learning hours and any specific requirements in terms of practical/ clinical-based learning. The indicative list of learning and teaching methods includes information on the proportion of the course delivered by each method and details where a particular method relates to a particular element of the course.</p>
<p>The information included in this section complements that found in the Key Information Set (KIS), with the programme specification providing further information about the learning and teaching methods used on the course.</p>
<p>The information included in this section complements that found in the Key Information Set (KIS), with the programme specification providing further information about the learning and teaching methods used on the course. The learning is largely structured around short, integrated, patient-focused cases that run</p>

⁶ Please refer to the QAA website for details.

throughout the course, and each level builds upon the knowledge gained in the previous year. Knowledge is integrated and consolidated through activities and guided sessions.

Students engage in a range of learning and teaching opportunities including lectures, laboratory-based practical classes, workshops and small group work, seminar and poster presentation, tutorials, placements and guided independent study. In addition, students will also experience most of the following during their course:

- critical studies groups and group discussion
- independent and enquiry-based learning, drawing upon a range of resources;
- formative peer and self-assessment;
- reflective learning;
- research and development activities;
- virtual learning environment (student central);

Pharmacy is a multi-disciplinary health profession that brings together health sciences with chemical sciences. Pharmacists are responsible for ensuring the legal and safe supply of medicines, the quality of medicines supplied to patients, and that the medicines prescribed are suitable. They also advise patients, healthcare professions and other members of the public about medicines, their safe and effective use, and possible risks associated with them. They respond to patients' symptoms and offer advice on medicines' sale in pharmacies as well as providing services to patients such as smoking cessation, blood pressure measurement, anticoagulation therapy and cholesterol management.

A pharmacy degree programme has to address all of these responsibilities and activities and thus covers a wide range of subject disciplines: chemistry, biochemistry, microbiology, physiology and anatomy, pharmacology, pathology, psychology, social science, and law. Covering all of these disciplines in a coherent way that is relevant to pharmacy is a challenging task. Traditionally, these disciplines would be delivered in discreet units of teaching, commonly modules.

The structure of the Brighton MPharm degree is a departure from traditional modular degrees, with the material being delivered via a case-based approach in which the subject disciplines are fully integrated. Assessments are also integrated and are carefully structured to ensure that the graduate achieves mastery of all the subject disciplines to a level that is commensurate with the requirements of a pharmacy graduate.

In year 1, students will look at what it means to be a pharmacist, including the role of chemistry, medicines, professionalism and ethics. They will be presented with a number of conditions that will be considered, analysed, and then appropriately treated, including cancer, general pain, gastrointestinal disturbances, anaemia, skin conditions, coughs and colds, holiday health and veterinary health.

Year 2 sees students expand their knowledge into the areas of asthma, sexual health, infections, the renal system, women's health, type 2 diabetes, heart disease, memory impairment and issues around industrial pharmacy.

In year 3, students learn about psychiatry, autoimmune diseases, arthritis, epilepsy, sleep disorders, ADHD, bipolar, OCD, tuberculosis, HIV, vaccines, substance misuse and drug discovery and development.

In the final year, students will complete a research project and choose optional modules that deal with specific topics in greater depth; they will examine pharmacy law and ethics, and multisystem disorders in order to prepare them for practice. The students' individual projects play a key part in developing and testing the students' abilities in the area of broad project management and primary research. Other key skills, including research techniques, data handling and critical analysis of source material, will also be developed and assessed in the project module (PYM40).

Students are provided with details of the cases studied in a particular year at the start of that academic year. This ensures that the material covered is fully up-to-date.

Experiential learning is a compulsory element of the course, and this involves placements in community pharmacy (level 4 – two half days), visits to the Leaf Hospital, clinics and/or wards (level 5 - 3 x 4 hours), a week placement in a secondary care ward-based setting (level 6 – 37 hours) and a further 4 day hospital-based placement and a 3 day community-based placement at level 7. These provide opportunities for students to engage with skills taught in classroom settings. In addition to placements, practical elements are also present in the form of laboratory and workshop sessions to reinforce the student's knowledge and understanding. Every module is supported by formative opportunities.

Formative tasks and assessments are embedded throughout the delivery of the subject. A range of different types of tasks ensure that students are engaged with the material, are able to self-evaluate and

improve their learning by targeting their areas of improvement. Formative assessments include on-line multiple choice questions, essays/long answer questions, or written and verbal short answer questions set in lectures and laboratory sessions. Feedback for these assessments is provided in class and orally for the most part, embedded in the delivery of the course content.

Inclusive assessment is embedded within the course structure and students will have one module per year that offers a choice in the assessment task. This is exemplified by the opportunity to present the reflective statements required in continuing professional development (CPD) entries as either written or video entries (PY164 Integrated Pharmaceutical Knowledge Attributes and Skills 1; PY264 Integrated Pharmaceutical Knowledge Attributes and Skills 2; PY364 Integrated Pharmaceutical Knowledge, Attributes and Skills 3; PYM62 Preparing for Practice).

Each year of study carries 120 credits (Credit Accumulation and Transfer Scheme). For purposes of assigning credit to learning achievement, credit-bearing units (called modules for purpose of alignment with the university's assessment regulations) and based on subject disciplines have been devised. Students are expected to demonstrate proficiency in all of the subject disciplines that make up pharmacy and this approach to allocating credit weighting to aspects of assessment ensures that the pharmacy graduate from Brighton is a fully rounded and competent practitioner. Each 10-credits represents a notional 100 hours of student effort. In this model, of the 100 hours of student effort, approximately 30 hours are taken-up with the presentation of learning material, the remaining 70 hours are occupied with directed study, preparation for coursework assessments (both summative and formative) and revising for and preparing for the in-module and end-of-module assessments.

ASSESSMENT

Assessment methods

This section sets out the summative assessment methods on the course and includes details on where to find further information on the criteria used in assessing coursework. It also provides an assessment matrix which reflects the variety of modes of assessment, and the volume of assessment in the course.

The information included in this section complements that found in the Key Information Set (KIS), with the programme specification providing further information about how the course is assessed.

The course contains some compulsory assessments not included in the breakdown provided on the KIS because they cannot be directly linked to credit. For example a pass/fail skills test included in one of the modules or as a course requirement. Full details of assessments within a module can be found on the University's VLE, student central.

To ensure students have engaged with the integrated curriculum, and think in an integrative manner, all aspects of the course are assessed in written (MCQs, SAQs, LAQs) case-led examinations. At levels 4 – 6), students sit three integrated exam papers (of 3 hours each) throughout the academic year.

Competencies related to pharmacy practice are assessed in all years of the course using OSCEs. In year 1 these are based around relatively simple scenarios of students responding to patients' symptoms in a community pharmacy setting. This progresses to more complex clinical scenarios in the subsequent years of the course which require the students to demonstrate higher level competencies to ensure patient safety.

Good numeracy skills are considered essential to the safe practice of pharmacy therefore these are assessed in every year of the course with increasing complexity.

Guidance and feedback on laboratory report writing is given in year one through tutorials. These skills are assessed summatively during the first three years of the course preparing the students for their research project in year 4.

In each year of the course there are experiential visits; students have to complete a log book which includes a reflective statement as well as a number of pharmaceutical tasks. These increase in complexity from year 1, which is predominately observational, through to year 4 where students undertake counselling of patients in both the hospital and community sectors.

Assessments are carefully structured to ensure that the graduate achieves mastery of the material to a level that is commensurate with the requirements of a pharmacy graduate by both the GPhC while meeting the requirements of the University's academic framework in complying with the Quality Assurance Agency level descriptors (4 to 7). Assessments are designed to encourage students to

integrate knowledge and skills from scientific disciplines and progressively test students' abilities to apply this to patient care.

K1 sufficient academic and professional knowledge to interpret and evaluate prescriptions and other relevant and appropriate orders for drugs and medicines;	PY165, PY166, PY167 exam and PY164 assessments. PY265, PY266, PY267 exam, PY267 coursework and PY264 assessments. PY365, PY366, PY367 exam and PY364 assessments. PYM62 exam and OSCE
K2 the ability to supply drugs and medicines in accordance with current legislation and codes of professional conduct and practice;	PY165, PY166, PY167 exam and PY164 assessments. PY265, PY266, PY267 exam and PY264 assessments. PY365, PY366, PY367 exam and PY364 assessments. PYM62 exam and OSCE
K3 insight into the role of pharmacy in primary health care;	PY165, PY166, PY167 exam and PY164 assessments. PY265, PY266, PY267 exam and PY264 assessments. PY365, PY366, PY367 exam and PY364 assessments. PYM62 exam and OSCE
K4 an in-depth understanding of, and ability to discuss critically, the scientific principles underlying the design, production, mechanisms of action and use of drugs and medicines;	PY165, PY166, PY167 coursework and exam PY265, PY266, PY267 coursework and exam PY365, PY366, PY367 coursework and exam PYM62 coursework and exam
K5 the ability to differentiate between modifiable risk factors for health and to formulate appropriate means for client education and the promotion of healthy lifestyles;	PY165, PY166, PY167 exam and PY164 assessments PY265, PY266, PY267 exam, PY267 coursework and PY264 assessments PY365, PY366, PY367 exam, PY367 coursework and PY364 assessments PYM62 coursework and exam
K6 the capability to interact with and question clients appropriately and to evaluate the symptoms of common diseases and provide relevant counselling on the use of medicines, both prescribed and non-prescribed; the ability to differentiate between minor illness and major conditions and the need to refer the latter;	PY165, PY166, PY167 exams and PY164 assessments. PY265, PY266, PY267 exam, PY267 coursework and PY264 assessments PY365, PY366, PY367 exam and PY364 assessments PYM62 exam and OSCE
K7 an appreciation of the place of complementary and alternative therapies in modern healthcare;	PY165, PY166, PY167 exam and PY164 assessments PY265, PY266, PY267 exam and PY264 assessments PY365, PY366, PY367 exam and PY364 assessments
K8 a knowledge of adverse drug reactions and medication errors and the ability to use this knowledge to manage their prevention, monitoring and reporting using appropriate systems;	PY165, PY166, PY167 exam and PY164 assessments PY265, PY266, PY267 exam, PY267 coursework and PY264 assessments PY365, PY366, PY367 exam and PY364 assessments PYM62 exam and coursework
K9 the ability to appraise critically a patient's medication and formulate a Pharmaceutical Care Plan, suggesting, where necessary, alterations in dosage form/strength or therapy;	PY165, PY166, PY167 exam and PY164 assessments. PY265, PY266, PY267 exam, PY267 coursework and PY264 assessments PY365, PY366, PY367 exam and PY364 assessments PYM62 exam and coursework
K10 an ability to apply the principles of research methods used in the natural, clinical, physical and social sciences and to design appropriate experiments for conducting a research project;	PYM40 Project report, poster and <i>viva voce</i>
K11 an ability to apply critically the principles of quality and quality assurance mechanisms in appropriate aspects of scientific and professional activities.	PY165, PY166, PY167 coursework and exam PY265, PY266, PY267 coursework and exam PY365, PY366, PY367 coursework and exam PYM62 coursework
S1 competence in performing pharmaceutical calculations	PY165, PY166, PY167, PY164 exam PY265, PY266, PY267, PY264 exam PY365, PY366, PY367, PY364 exam

	PYM62 exam
S2 the ability to dispense medicines extemporaneously;	PY164 practical PY264 practical PY364 practical PYM62 practical
S3 an ability to use information technology effectively to gather, integrate and communicate information relevant to pharmacy;	PY164 coursework PY264 coursework PY364 coursework PYM62 coursework PYM40 Project report, poster and <i>viva voce</i> ;
S4 self-directed learning with reflective practice and the ability to adapt to changing requirements and expectations;	PY164 coursework PY264 coursework PY364 coursework PYM62 coursework
S5 critical thinking, interpretative and problem-solving capabilities, sometimes in the absence of complete information;	PYM40 Project report, poster and <i>viva voce</i> Level 7 optional special topics modules
S6 an ability to discuss critically and respond appropriately to the social and ethical issues arising from the practice of pharmacy.	PY164 coursework PY264 coursework PY364 coursework PYM62 coursework

SUPPORT AND INFORMATION	
Institutional/ University	<p>All students benefit from:</p> <ul style="list-style-type: none"> • University induction week programme • University student contract https://www.brighton.ac.uk/current-students/my-studies/student-policies-and-regulations/index.aspx • Course Handbook • Extensive library facilities centred in main Aldrich library • Computer pool rooms: Six open access computer pool rooms on the Moulsecoomb site with over 200 workstations (and a further 450 network points for personal PCs in the library). All are linked to the University network services and have daily user support help desk)) • External and internal E-mail and internet access, and may set up personal websites • Student services, including Welfare, Careers, Counselling, Legal, Financial, Accommodation, Childcare, Medical, Sexual Health and Chaplaincy support; • Student central • Academic Study Kit (ASK) Study Skills • Student support and guidance tutor • Careers Planning Agreement • Personal academic tutor
Course-specific additional support, specifically where courses have non-traditional patterns of delivery (e.g. distance learning and work-based learning) include:	<p>In addition, students on this course benefit from:</p> <ul style="list-style-type: none"> • School Safety Policy • Student central course specific areas • Small group tutorials • Assistant Course Leaders for each year of study • Placement Officer support <p>Specialist facilities including the following:</p> <p>High field NMR; Time-of-flight high resolution and ion-trap ESI- mass spectrometry; UV/Vis, near infra-red, mid infra-red, Raman spectrophotometry; Fluorimetry; HPLC; GLC; Particle size and zeta potential; Rheometry; Differential scanning calorimetry; UV/Vis plate readers; MS</p>

	<p>Tablet press; Dosage form evaluation equipment including dissolution, disintegration apparatus; Twin stage and multistage liquid impingers; Texture analysis.</p> <p>Specialist pharmacology equipment; Ultracentrifuge; Autoclaves; Electrophysiology equipment.</p> <p>Microscopy suite including electron, confocal and atomic force microscopy Tissue culture suite Histology facilities</p> <p>Clinical Skills Laboratory with simulated patient mannequins (SimMan) and clinical dummies (Resusci Anne)</p> <p>A bespoke National Pharmaceutical Association training manual surpassing the requirements for a recognised Counter Assistants qualification. Detailed, explicit, handbooks and log books to accompany all experiential hospital and community visits.</p> <p>Research Informed teaching Teaching in the school is informed by research of very high quality. The MPharm course is delivered within a highly research-active environment. In the Research Excellence Framework (REF) 2014, Pharmacy submitted into the A3 unit of assessment with colleagues from Nursing and Allied Health Professionals and the Medical School (see http://www.brighton.ac.uk/lhp-research-groups/pharmacy-health-and-biomolecular-sciences/index.aspx for details). In the 2014 REF within the A3 (Subjects Allied to Medicine Category) 38% of the research was considered to be world-leading (Outputs 13.2 %, Environment 87.5 % and Impact 80 %) further, 44% was considered to be internationally excellent.</p> <p>The course is delivered by research active staff and many of the final year modules are focussed directly on their research interests. For the final year project, students are placed within research groups within the School and benefit from the research expertise of their project supervisors and associated post-doctoral fellows and post-graduate students. In addition, the course has a Pharmacy Education Research Unit that was established to undertake research into pedagogic issues that arise from local and national issues. This informs the course curriculum design and teaching methods.</p> <p>Education for Sustainable Development Technological developments arise out of science, and problems generated by development are solved by knowledge gained from further science. Therefore the course educates students for sustainable development by studying science and developing scientific skills, research skills and critical thinking. Pharmacy students, through their studies, gain insight into the causes and treatments of disease and graduates are equipped to make a significant input into the management of diseases. Their impact on the health of the nation with the associated sustainability benefits, especially in the area of preventable diseases, will be large.</p>
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PART 3: COURSE SPECIFIC REGULATIONS

COURSE STRUCTURE
This section includes an outline of the structure of the programme, including stages of study and progression points. Course Leaders may choose to include a structure diagram here.

The structure of the MPharm degree is a departure from traditional modular degrees, whilst keeping within the ethos of the modular scheme for purposes of allocating credit for learning and being consistent with the University's General Examination and Assessment Regulations (GEAR).

The subject material of the MPharm is fully integrated and taught via case studies for the first three years of the course (levels 4 – 6). Formative assessment (online) are associated with each case. The assessment of the learning in each year is undertaken in an integrated manner through a series of examinations taken at three points in each year. Material covered in Module PYX65 (where X indicate year of study), will be assessed in the first exam; material delivered in Module PYX66 will be assessed at the second time point and a final paper will assess the material covered in Module PYX67. There is also a pharmaceutical calculations exam and an Objective Structured Clinical Examination (OSCE) during each academic each year.

The nature of the assessments will increase in complexity year-on-year, with the first year (level 4) exams being mainly fixed-response with some short-answer questions and one long-answer question, the second year (level 5) being a mixture of fixed-response (fewer than year 1), short-answer questions (more than year 1) and a long-answer question and the third year (level 6) exams being a combination of fixed-response, short- and long-answer questions. In this third year, more extensive written answers are required, based on pharmaceutical scenarios and patient care plans. In the final year (level 7) students will undertake a research project, study two elective modules (Special Topics) which reflect the research interests of the staff and study a large 60 credit integrated module entitled Preparing for Practice.

Level 4 (Year 1)

At level 4 the course begins with a four-week induction to pharmacy and some of the generic skills required for a successful career in pharmacy, for example basic biological, chemical and mathematical skills and an introduction to the structure of the UK healthcare services and pharmaceutical legislation. Following the generic introduction students are introduced to case studies, the first being a discussion of a patient with an eye infection. Such a case study allows for the introduction of microbiology with additional detail in cell biology, whilst maintaining a clear indication of the knowledge to the outcome of the case. The same case then allows description of the mechanisms of antibacterial drug action and the basic physicochemical properties of drug molecules. At the end of the case study students are able to self-assess their knowledge and understanding by means of an online, multiple choice formative assessment.

A second case study, lung cancer, is used to develop knowledge of medicinal chemistry and drug-receptor interactions further and to introduce concepts of health promotion, healthy living and patient behaviour. Further case studies of pain, sexual health, indigestion and heartburn, skin disorders, coughs and colds, holiday health and veterinary medicine are used to develop the tuition on medicinal and analytical chemistry, pharmaceuticals and drug delivery, mechanisms of drug action and pharmacy practice, pharmaceutical legislation and communication skills. Each case is accompanied by laboratory coursework and on-line self-assessment formative tests and directed independent study, the completion of which is recorded in an on-line student log book (e-portfolio).

The learning outcomes of each module are assessed by coursework and integrated written examinations where marks for different cases are apportioned to four modules PY164 Integrated Pharmaceutical Knowledge Attributes and Skills 1 (IPKAS 1) (30 credits) which is an overarching module assessing material from all cases, PY165 Introductory Pharmacy 1 (30 credits), PY166 Introductory Pharmacy 2 (30 credits) and PY167 Introductory Pharmacy 3 (30 credits).

Level 5 (Year 2)

Level 5 continues in the same integrated manner with an increasing spiral/depth of knowledge. At level 5 the material is presented by means of case studies of asthma, a respiratory infection, peptic ulcer disease, alcoholic liver disease, a chlamydia infection, renal failure, type 2 diabetes mellitus, ischaemic heart disease and neurodegenerative disease. These are supplemented by a study of women's health which follows an individual over 30+ years to cover aspects of contraception, pregnancy and menopause and a description of a pharmaceutical incident involving the recall of a product due to product degradation. These cases allow development of knowledge of the physiology and pathology underlying the disorders, the chemistry and pharmaceutical considerations of the drugs used for their treatment and the relevant aspects of pharmacy practice and legislation. The level of detail and the complexity of the underlying disorders are greater than the cases studied at level 4.

As at level 5, each case is followed by an on-line, formative self-assessment and the learning outcomes of each module are assessed by coursework and integrated written examinations where marks for different cases are apportioned to four modules PY264 Integrated Pharmaceutical Knowledge Attributes and Skills 2 (IPKAS 2) (30 credits); this is an overarching module assessing material from all cases,

PY265 Intermediate Pharmacy 1 (30 credits), PY266 Intermediate Pharmacy 2 (30 credits) and PY267 Intermediate Pharmacy 3 (30 credits).

Level 6 (Year 3)

At Level 6 the underlying physiological, pharmacological, chemical and pharmaceutical aspects of case studies relating to affective disorders, atrial fibrillation, autoimmune disorders (including type 1 diabetes), breast cancer, epilepsy and sleep disorders, paediatric psychiatric disorders and substance misuse are covered in an integrated manner alongside the implications of each of the scenarios for pharmacy practice. These cases are more complex than those covered at level 5 and multisystem disorders are introduced. Additional cases cover an incidence of product recall due to microbial contamination and a description of the drug discovery process from target identification to pre-formulation, clinical trials and product registration.

Each case is followed by an on-line, formative self-assessment and the learning outcomes of each module are assessed by coursework and integrated written examinations where marks for different cases are apportioned to four modules PY364 Integrated Pharmaceutical Knowledge Attributes and Skills 3 (IPKAS 3) (30 credits); this is an overarching module assessing material from all cases, PY365 Advanced Pharmacy 1 (30 credits), PY366 Advanced Pharmacy 2 (30 credits), PY367 Advanced Pharmacy 3 (30 credits).

Level 7 (Year 4)

The final year is dominated by a 60-credit 'Preparing for Practice' module (PYM62) which covers pharmaceutical care of complex, multisystem disorders and recent changes in pharmaceutical legislation and practice. The module also contains elements which continue to develop the skills required for pharmacy practice, e.g. calculations, and also to prepare them for eventual pre-registration assessments. The material within this module is assessed by means of traditional, unseen, written examinations; a dispensing assessment, a peer assessment of a simulated ward round and an Objective Structured Clinical Examination (OSCE).

The final year also contains the 40-credit individual research project module (PYM40) which includes tuition in experimental design and analysis. A range of projects are available ranging from clinical studies and audits through to questionnaire-based, meta-analysis and laboratory-based projects which are supervised by staff with particular expertise in these fields. The projects run over many weeks allowing the student to generate original data which is then presented in the form of a project report (dissertation) and poster which is assessed at dedicated poster sessions where the student also undergoes a viva examination. The students also prepare a Literature Review during the early stages of their project which is also assessed.

A further 20 credits of the final year is comprised of the study of two Special Topics. These are chosen by from a wide range of pharmaceutical subject matter and reflect the diverse research interests of MPharm academic staff.

Level 4 (Year 1)

PY164 Integrated Pharmaceutical Knowledge Attributes and Skills 1 (IPKAS 1) 30 credits		
PY165 Introductory Pharmacy 1 30 credits	PY166 Introductory Pharmacy 2 30 credits	PY167 Introductory Pharmacy 3 30 credits

Level 5 (Year 2)

PY264 Integrated Pharmaceutical Knowledge Attributes and Skills 2 (IPKAS 2) 30 credits		
PY265 Intermediate Pharmacy 1 30 credits	PY266 Intermediate Pharmacy 2 30 credits	PY267 Intermediate Pharmacy 3 30 credits

Level 6 (Year 3)

PY364 Integrated Pharmaceutical Knowledge Attributes and Skills 3 (IPKAS 3) 30 credits		
PY365 Advanced Pharmacy 1 30 credits	PY366 Advanced Pharmacy 2 30 credits	PY367 Advanced Pharmacy 3 30 credits

Level 7 (Year 4)

PYM40 Research Project 40 credits	PYM62 Preparing for Pharmacy Practice 60 credits	Special Topic Optional modules 10 credits
		Special Topic Optional modules 10 credits

Modules			
Status:			
M = Mandatory (modules which must be taken and passed to be eligible for the award)			
C = Compulsory (modules which must be taken to be eligible for the award)			
O = Optional (optional modules)*			
*Please note that for optional modules this is an indicative list and modules are offered subject to availability			
Module Codes	Status	Module Title	Credit
Level 4			
PY164	M	Integrated Pharmaceutical Knowledge Attributes and Skills 1	30
PY165	M	Introductory Pharmacy 1	30
PY166	M	Introductory Pharmacy 2	30
PY167	M	Introductory Pharmacy 3	30
Level 5			
PY264	M	Integrated Pharmaceutical Knowledge Attributes and Skills 2	30
PY265	M	Intermediate Pharmacy 1	30
PY266	M	Intermediate Pharmacy 2	30
PY267	M	Intermediate Pharmacy 3	30
Level 6			
PY364	M	Integrated Pharmaceutical Knowledge Attributes and Skills 3	30
PY365	M	Advanced Pharmacy 1	30
PY366	M	Advanced Pharmacy 2	30
PY367	M	Advanced Pharmacy 3	30
Level 7			
PYM40	M	Research Project	40
PYM62	M	Preparing for Pharmacy Practice	60
BYM32	O	Biomedical Implants and Cell-based Strategies	10
BYM37	O	Medical Genetics	10
CHM01	O	Advanced Pharmaceutical Analysis	10
CHM09	O	Industrial Manufacturing Processes	10
CHM10	O	Advances in Biochemical and Clinical Analysis	10
PYM01	O	Current Topics in Infection	10
PYM02	O	Psychopharmacology	10
PYM03	O	Ion Channel Pharmacology and Physiology	10
PYM04	O	Specialised Clinical Practice	10
PYM05	O	Advanced Diabetes Therapies	10
PYM06	O	Oxidative Stress and Human Disease	10
PYM08	O	Pharmacological Aspects of Neuronal Ageing	10
PYM09	O	Pharmaceutical Care of Surgical Patients	10
PYM10	O	Global Perspectives on Health and Medicines	10
PYM11	O	Quality Issues in Complementary Therapies that utilise plants	10
PYM12	O	Monitoring Molecules in Neuroscience	10
PYM36	O	Business Studies for Pharmacists	10
BYM69	O	Clinical Microbiology in the post-antimicrobial era	10
PBM20	O	Data and Scientific Theories	10

AWARD AND CLASSIFICATION							
Award type	Award*	Title	Level	Eligibility for award		Classification of award	
				Total credits ⁷	Minimum credits ⁸	Ratio of marks ⁹ :	Class of award
Final	MPharm (Hons)	Master of Pharmacy with Honours	7	Total credit 480	Minimum credit at level of award 120	Level 6 and 7 (50:50)	Honours degree
Intermediate	BSc (Hons)	Bachelor of Science in Pharmaceutical Studies with Honours	6	Total credit 360	Minimum credit at level of award 90	Levels 5 and 6 (25:75)	Honours degree
Intermediate	BSc	Bachelor of Science in Pharmaceutical Studies	6	Total credit 300	Minimum credit at level of award 60	N/A	Not applicable
Intermediate	Dip HE (Science)	Diploma of Higher Education (in Science)	5	Total credit 240	Minimum credit at level of award 90	N/A	Not applicable
Intermediate	Cert HE (Science)	Certificate of Higher Education (in Science)	4	Total credit 120	Minimum credit at level of award 90	N/A	Not applicable
*Foundation degrees only		Progression routes from award:					
Award classifications		Mark/ band %	Foundation degree	Honours degree	Postgraduate¹⁰ degree (excludes PGCE and BM BS)		
		70% - 100%	Distinction	First (1)	Distinction		
		60% - 69.99%	Merit	Upper second (2:1)	Merit		
		50% - 59.99%	Pass	Lower second (2:2)	Pass		
		40% - 49.99%		Third (3)			

⁷ Total number of credits required to be eligible for the award.

⁸ Minimum number of credits required, at level of award, to be eligible for the award.

⁹ Algorithm used to determine the classification of the final award (all marks are credit-weighted). For a Masters degree, the mark for the final element (e.g. dissertation) must be in the corresponding class of award.

¹⁰ Refers to taught provision: PG Cert, PG Dip, Masters.

EXAMINATION AND ASSESSMENT REGULATIONS

Please refer to the *Course Approval and Review Handbook* when completing this section.

The examination and assessment regulations for the course should be in accordance with the University's General Examination and Assessment Regulations for Taught Courses (available from staffcentral or studentcentral).

Specific regulations which **materially** affect assessment, progression and award on the course
e.g. Where referrals or repeat of modules are not permitted in line with the University's *General Examination and Assessment Regulations for Taught Courses*.

The course regulations are in accordance with the University's General Examination and Assessment Regulations (available from the School Office or Academic Services).

In addition, the following course-specific regulations apply:

- All modules must be passed and compensation or trailing for failed modules is only permitted under exceptional circumstances.
- Students must achieve a threshold mark of 35% (40% at level 7) in each mark-bearing component of assessment described in the module descriptors.
- Students must meet a minimum attendance requirement of 80% of all laboratory classes, 80% of all workshops and 80% of all tutorial classes. A failure to meet this requirement may result in the student being denied a referral.
- Attendance at all experiential visits and interprofessional learning (IPL) events is compulsory for each level of study (governed by components of relevant modules).
- Where a student fails to pass all modules after referral they may be allowed to re-sit the failed module. Such students will be recommended to attend ALL lectures (i.e. all case studies).
- In addition to the academic and disciplinary requirements of the University of Brighton, students will be required to abide by the Standards for Pharmacy Professionals as published by the General Pharmaceutical Council. The University's Fitness to Practise procedure applies to this course.
- Completion of a satisfactory Fitness to Practise declaration.
- Students must possess a satisfactory DBS check.

Exceptions required by PSRB

These require the approval of the Chair of the Academic Board

See above: 'Condonation, compensation, trailing, extended re-sit opportunities and other remedial measures should be extremely limited if they are permitted at all.' Future pharmacists: Standards for the initial education and training of pharmacists
https://www.pharmacyregulation.org/sites/default/files/GPhC_Future_Pharmacists.pdf
Aegrotat awards for MPharm are not permitted.