# **REGULATIONS FOR THE MASTER OF CLINICAL PHARMACY (MClinPharm)**

These regulations apply to candidates admitted to the Master of Clinical Pharmacy in the academic year 2021-22 and thereafter.

(See also General Regulations and Regulations for Taught Postgraduate Curricula)

## MCP.1 Definition

The degree of Master of Clinical Pharmacy (MClinPharm) is a postgraduate degree awarded for the satisfactory completion of the curriculum of 2 academic years of part-time study or equivalent in the Department of Pharmacology & Pharmacy, Li Ka Shing Faculty of Medicine.

# MCP.2 Admission requirements

To be eligible for admission to the curriculum leading to the degree of Master of Clinical Pharmacy, candidates shall:

- a) comply with the General Regulations; and
- b) comply with the Regulations for Taught Postgraduate Curricula; and
- c) be a registered Pharmacist holding a Bachelor's degree in Pharmacy from this University, or from another university, or comparable institution accepted for this purpose; and
- d) be a registered Pharmacist in Hong Kong; and
- e) satisfy the examiners in a qualifying examination, if required.

## MCP.3 Qualifying examination

- a) A qualifying examination may be set to test candidates' formal academic ability or their ability to follow the courses of study prescribed. It shall consist of one or more written papers or their equivalent and may include a project report; and
- b) Candidates who are required to satisfy the examiners in a qualifying examination shall not be permitted to register until they have satisfied the examiners in the examination.

## MCP.4 Award of degree

To be eligible for the award of the degree of Master of Clinical Pharmacy, a candidate shall:

- a) comply with General Regulations; and
- b) comply with the Regulations for Taught Postgraduate Curricula; and
- c) complete the curriculum and satisfy the examiners in accordance with the regulations set out below.

The curriculum shall normally extend over two academic years of part-time study. Candidates shall not be permitted to extend their studies beyond the maximum period of registration of three years of part-time study, unless otherwise permitted or required by the Board of the Faculty.

## MCP.6 Completion of curriculum

To complete the curriculum, candidates shall:

- a) satisfy the requirements prescribed in TPG 6 of the Regulations for Taught Postgraduate Curricula;
- b) take not less than 69 credits in the manner specified in these regulations and the syllabuses, and follow the instructions in the syllabus prescribed for the courses and complete satisfactorily all required written, practical or clinical work;
- c) satisfy the examiners in the courses by continuous assessments and/or written examinations and/or objective structured clinical pharmacy examination (OSCPE); and
- d) complete and present a satisfactory practice-based research project on an approved topic. The examiners may also prescribe an oral examination.

Candidates who fail to fulfil the requirements within the prescribed maximum period of registration shall be recommended for discontinuation under the provision of General Regulation G12, except that candidates who are unable because of illness or circumstances beyond their control to complete the requirements within the prescribed maximum period of registration, may apply for permission to extend their period of studies.

## MCP.7 Assessments

- a) A candidate who:
  - i) fails to satisfy the examiners in continuous assessments of a course may be permitted to retake the prescribed assessment(s); or
  - ii) fails to satisfy the examiners in the written examinations/objective structured clinical pharmacy examination (OSCPE) of a course may be permitted to re-sit the examination(s) with or without repeating the course; or
  - iii) fails to satisfy the examiners in the examination of the practice-based research project, but has satisfactorily completed the prescribed work, may be permitted to re-submit the practice-based research project within a specific period of time.
- b) A candidate who:
  - i) is not permitted to retake the prescribed assessment(s) or repeat a course which he/she has failed, or present himself/herself for re-examination(s), or re-submit a revised practice-based research project; or
  - ii) fails to satisfy the examiners in written examinations at the third attempt;

may be required to discontinue his/her studies.

#### MCP.8 Publication based on work approved

Any publication based on work approved for a higher degree should contain a reference to the effect that the work was submitted to The University of Hong Kong for the award of the degree.

# MCP.9 Grading System

Individual courses shall be graded according to the grading system of "Pass" and "Fail".

## SYLLABUS FOR THE DEGREE OF MASTER OF CLINICAL PHARMACY

The Master of Clinical Pharmacy curriculum consists of 7 core courses (3 or 6 or 9 credit units in each course), 3 elective courses (6 credit units in each course) and a research project (15 credit units), making a minimum of 69 credit units of teaching and prescribed work.

The mode of assessment for non-capstone courses comprises of 40-100% continuous assessment and 0-60% examination (written or objective structured clinical pharmacy examination). Candidates are also required to submit a research project, which is the capstone experience, to the satisfaction of the examiner(s).

## COURSES

Students are required to complete 7 core courses, 2 elective courses, and a research project.

#### **CORE**

#### Clinical Research

<b>Course Code</b> MCPH7002	Course Name Evidence-based Practice	Credit 3
<u>Therapeutics</u>		
<b>Course Code</b>	Course Name	Credit
MCPH7130	Neurology, Psychiatry, Immunology & Rheumatology	6
MCPH7140	Gastroenterology, Hepatology & Infectious Diseases	6
MCPH7150	Nephrology, Fluids & Electrolytes, Paediatrics & Pregnancy	6
MCPH7160	Cardiometabolic Diseases, Respiratory & Critical Care	9
Clinical Practice		
<b>Course Code</b>	Course Name	Credit
MCPH7410	Integrated Pharmacy Practice I	6
MCPH7420	Integrated Pharmacy Practice II	6
<b>ELECTIVE</b>		
Course Code	Course Name	Credit
MCPH7110	Geriatric & Ambulatory Care	6
MCPH7120	Oncology	6
MCPH7170	Advanced Topics in Paediatrics	6
CAPSTONE		

<b>Course Code</b>	Course Name	Credit
MCPH7201	Research Project	15

The research project represents 15 credit units of work and students are required to undertake an empirical study. The research project involves formulation of the research idea, clarification of conceptual issues, literature review, formulation of final research question, design of study, feasibility assessment, pilot work, Institutional Review Board (IRB) application, setting up of collaboration (if applicable), data collection logistic, research project management, database design, research log-book management, data collection, progress review, monitoring for data quality, data cleansing, data analysis, interpretation of results, reporting, writing up of report. These are carried out under the guidance of a project supervisor.

## **COURSE DESCRIPTION**

## **CORE COURSES**

## Clinical Research

#### MCPH7002 Evidence-based Practice (3 credits)

This course will introduce the concepts of clinical epidemiology and biostatistics that are essential components of evidence-based practice. Various study designs and methodologies used to investigate associations between risk factors, interventions and disease outcomes will be covered. The course will also shed light on the steps of evidence-based practice with clinical cases, and the important concepts of critical appraisal of literature to guide clinical decision making. Students will gain practical guidance on navigating the research journey as new investigators. Topics include the development of research question, literature review, study design and methods, research ethics, preparation of research protocol, and manuscript preparation.

## **Therapeutics**

#### MCPH7130 Neurology, Psychiatry, Immunology & Rheumatology (6 credits)

Local and overseas practitioners will discuss common psychiatric and neurologic disorders with emphasis on pharmacotherapy and patient-centred pharmaceutical care. Topics include anxietydepressive disorders, psychosis, substance misuse, Parkinson's disease, stroke, multiple sclerosis, seizure and epileptic disorders. Pharmacotherapeutic management of patients with rheumatological disorders and the use of immunomodulating agents in managing auto-immune conditions and organ transplantation will be discussed.

#### MCPH7140 Gastroenterology, Hepatology & Infectious Diseases (6 credits)

This course covers the latest pharmacotherapies in the gastrointestinal tract and liver diseases, including Crohn's disease, ulcerative colitis, liver cirrhosis and hepatitis. Local experts will cover the strategies of managing select infectious diseases and address important issues such as multi-drug resistant organisms and proper use of antimicrobials in special patient groups. Students will refine their knowledge of antimicrobials and principles of use that are essential to clinical practice. Students will have case-sharing with specialised pharmacist(s) (local or overseas) in the management of patients with multiple co-morbidities.

#### MCPH7150 Nephrology, Fluids & Electrolytes, Paediatrics & Pregnancy (6 credits)

This course will cover the principles of management and medication use in disease conditions related to renal system, fluid and electrolytes homeostasis. Students will appreciate how the complex interplay of

the cardiovascular, endocrine, renal, digestive and respiratory systems contribute to abnormalities in fluid and electrolyte homeostasis.

Students will learn principles of medication use in the paediatric population and pharmacological management of select paediatric conditions most relevant for Hong Kong practice. Drug use in pregnancy and breastfeeding will be covered.

# MCPH7160 Cardiometabolic Diseases, Respiratory & Critical Care (9 credits)

This course combines cardiometabolic diseases, respiratory conditions and critical care, highlighting the individuality and causational relationships between physiological systems. Students will acquire advanced knowledge and skills for managing complex clinical cases in settings ranging from ambulatory setting to critical care.

# **Clinical Practice**

# MCPH7410 Integrated Pharmacy Practice I (6 credits)

This course complements the clinical modules in the academic year and equips students with clinical skills and experience to provide and advance patient-centred pharmaceutical care in different healthcare settings. Through a combination of lectures, workshops and fieldtrips, students will learn transferable skills including: clinical assessment, communication skills, drug information, process of pharmaceutical care, practice and service planning.

# MCPH7420 Integrated Pharmacy Practice II (6 credits)

This course complements the clinical modules in the academic year and equips students with clinical skills and knowledge to provide patient-centred and evidence-based pharmaceutical care in different healthcare settings. Students will acquire knowledge and skills in the following areas: advanced disease management in special patient populations, intersection of Chinese Medicine and Western medicine, medication safety, application of evidence to practice, practice management, healthcare leadership and legal and ethical issues relevant to pharmacy practice.

# **ELECTIVE COURSES**

## MCPH7110 Geriatric & Ambulatory Care (6 credits)

This course provides a comprehensive overview of specific medical and pharmacological challenges in managing geriatric patients. Lectures will cover geriatric syndromes, patient assessment, palliative and end-of-life care, appropriate prescribing principles, deprescribing, and how socio-cultural factors interplay with health outcomes in the geriatric population.

Students will gain clinical knowledge in the management of minor ailments and ambulatory care for patients with chronic diseases. The in-depth coverage of select health conditions will emphasise the application of knowledge and judgement in differential diagnoses, pharmacological management and beyond in the primary care setting.

## MCPH7120 Oncology (6 credits)

This course discusses the use of pharmacological agents in cancer treatment, including targeted therapy and immunotherapy. Basic concepts of supportive care in cancer patients will be covered. Pharmacological management of solid organ tumours and haematological disordered are covered. Local and overseas oncology pharmacy specialists will illustrate principles in cancer pharmacotherapy and pharmaceutical services with case sharing or discussion.

#### MCPH7170 Advanced Topics in Paediatrics (6 credits)

This course places emphasis on the role of a paediatric pharmacist in the support and pharmaceutical management to children. This includes medication safety in children and neonates as the use of drugs in this group of patients can exhibit different pharmacodynamics and pharmacokinetics as compared to adults. Students will have case-sharing with specialised pharmacist(s) (local or overseas) in the management of paediatric patients. Students are expected to understand the need of paediatric patients and the current healthcare services provided to them.

## **CAPSTONE**

#### MCPH7201 Research Project (15 credits)

Students will complete a research project under the guidance of academic and site supervisors. Students will gain hands-on experience in formulating the research question, performing literature review, developing the study protocol, implementing the research project, composing a manuscript and disseminating the results of their project. Students will ensure that their study complies with principles of research integrity and ethics. Academic output includes the research project manuscript (at least 3,000 words, excluding references) and the research project poster (normally 400-600 words).