



**IBN SINA NATIONAL COLLEGE FOR MEDICAL  
STUDIES, JEDDAH**

**KINGDOM OF SAUDI ARABIA**

# **Master of Clinical Pharmacy Program**

**STUDENT HAND BOOK**

**Version -1 (2019-2020)**

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## **MASTER OF CLINICAL PHARMACY PROGRAM MISSION**

To graduate specialized clinical Pharmacist capable of taking roles in clinical settings that add significantly to professional pharmacy practice and to meet changing needs of healthcare systems.

## **PROGRAM OVERVIEW**

Ibn Sina National College for Medical Studies (ISNC) master of clinical pharmacy programme (MSCP) is a structured programme leading to the degree of the Master in Clinical Pharmacy. It will prepare students with specialised knowledge and skills to assume their roles in the provision of Clinical Pharmacy.

The faculty and professional staff are qualified individuals with unique interests and backgrounds who are dedicated to educating master of pharmacy students according to international principles and practices of pharmaceutical care.

MSCP in clinical pharmacy is a two and half year Program (5 semesters) as one and half years (3 semester of didactic courses) and 1 year (2 semesters of clinical rotations and research).

It is an outcome-based program designed especially for pharmacists employed in a healthcare setting, who want to enhance their clinical pharmacy knowledge and practice skills. Much of the learning is case-based so scientific and professional elements are integrated. The courses are designed to maximize contact between student and tutor

ISNC holds a distinction in the country for being as the first private institution to introduce Pharm. D degree in its pharmacy program.

ISNC has a campus that is spread over an area of 27,500 sqm and is self-contained and accommodates all necessary facilities including the Ibn Sina College hospital. Design of ISNC main building is in the shape of the letter 'H' where each of the wings houses the genders separately, yet facilitates easy communication and access to critical facilities and the central administrative setup. However, additional hospitals (New Al Jedaani Hospital at Ghulail District and Al Jedaani Hospital at Al Safa District) from within Al Jedaani Group are also deployed in training the students in order to ensure adequate exposure of each student to clinical facilities.

Master Program curriculum is designed as patient oriented care. The curriculum employs the Saudi Arabia Qualification Framework (SAQF) for formulating the learning outcomes of the program and its courses, namely:

- ❖ Knowledge (theories and Facts)
- ❖ Skills (practical Application of Knowledge
- ❖ Competencies
  - Independence and responsibilities
  - Professional Practice
  - Professional features

Development of this curriculum at ISNC was closely supervised by a college steering committee that included internal and external members who have experience in curriculum design and development, and it come as a product of efforts of collaboration between:

- Subject experts in the field of Clinical Pharmacy.
- Experts in Medical Education.
- Experts in curriculum development.
- Experts in quality assurance in education.

Commendable work has been done to identify program learning outcomes (PLO) and courses learning outcomes (CLOs) aligned with the three learning domains of the SAQF.

PLOs, Assessment Methods, and teaching Strategy are aligned to articulate a consistent agreement between the student learning and teaching methods. The CLOs are well explained to the students at the beginning of each course.

### **Benefits of Accredited Institute:**

- » Accreditation assures that a program has met quality standards set by the profession.
- » Accreditation helps students and their parents choose quality college programs.
- » Accreditation enables employers to recruit graduates they know are well-prepared.
- » Accreditation provides a structured mechanism to continuously assess, evaluate, and improve the quality of the program.
- » Accreditation is an important factor when a college or university is deciding whether to accept transfer credit from a student's previous school.

### **PROGRAM VICE DEAN**

#### **Dr. ABDULAZIZ ALYAHYA, MSc, PhD, USA**

Received his PhD in Pharmacology and Toxicology from University of Kansas, Lawrence, KS, United States. He is Associate Professor in Department of Pharmacology,

College of Pharmacy, King Saud University, Riyadh. Dr. Abdulaziz AlYahya is currently the Vice Chairman, Board of Trustees, Ibn Sina National College for Medical Studies, Jeddah, KSA. In addition, he is an associate member of international collaboration on repair discoveries (ICORD), University of British Columbia, Vancouver, BC, Canada. Also, he is a member of the society for Neuroscience.

### **DEGREE AWARDED**

Master of Clinical Pharmacy (MSCP)

### **SUMMARY OF CREDIT HOURS**

The content of this curriculum	
Required Courses	20 Credit Hours
Clinical rotations	24 Credit Hours
Research Project	4 Credit Hours
<b>Total</b>	<b>48 Credit Hours</b>

### **ADMISSION REQUIREMENTS**

All applicants must meet the following requirements:

- Hold a Bachelor's degree in Pharmacy and meet the requirements set by the clinical pharmacy program at ISNC or has an approved honours degree in pharmacy at a minimum GPA of 3.0 or equivalent.

- For students' continuation in the program, the student has to achieve and maintain at least minimum of grade GOOD "C", 70% (3.0 points).
- Having an appropriate TOEFL or IELTS test scores.
- Holding the Saudi council for Health Specialist (SCFHS) licensure.
- Passing the admission interview.

## CURRICULUM STUDY PLAN

### YEAR ONE:

Master of Clinical Pharmacy Curriculum Outline		
YEAR ONE		
Semester-1	Course Code	Credit Hr
Advanced Therapeutics - I	PHCL 111	3 (2+1+0)
Pharmacoeconomics	PHCL 112	1 (1+0+0)
Evidence Based Clinical Practice	PHCL 113	1 (1+0+0)
Applied Biostatistics	BIOS 111	2 (2+0+0)
Pharmacy Management	PHCL 114	1 (1+0+0)
<b>Total</b>	<b>8</b>	



<b>YEAR ONE (continue)</b>		
<b>Semester -2</b>	<b>Course Code</b>	<b>Credit Hours</b>
Advanced Therapeutics – II	PHCL 121	3 (2+1+0)
Patient Safety	PHCL 122	1 (1+0+0)
Research Methodologies	RESM 121	1 (1+0+0)
Elective course ( Medication Management , Pharmacy Practice, Pharmacogenomics and Pharmacoepidemiology)	PHCL 123-126	1 (1+0+0)
Research Project Part -I	PROJ 121	2 (0+2+0)
<b>Total</b>	<b>8</b>	

## **YEAR TWO:**

<b>YEAR TWO</b>		
<b>Semester -1</b>	<b>Course Code</b>	<b>Credit Hours</b>
Advanced Therapeutics - III	PHCL 211	3 (2+1+0)
Clinical Pharmacokinetics	PHCL 212	2 (1+1+0)
Patient Assessment	PHCL 213	1 (0+0+1)
Research Project Part-II	PROJ 211	2 (0+2+0)
<b>Total</b>	<b>8</b>	

YEAR TWO (continue)		
Semester-2	Course code	Credit Hours
Internal Medicine Rotation	PHCL 221	3 (0+0+3)
Cardiology Rotation	PHCL 222	3 (0+0+3)
Elective Rotation (Gastroenterology, Oncology, Emergency Care, Nutrition Support, Drug Information & poison Control Service)	PHCL 223 -227	3 (0+0+3)
Elective Rotation (Gastroenterology, Oncology, Emergency Care, Nutrition Support, Drug Information & poison Control Service)	PHCL 223 -227	3 (0+0+3)
Total	12	
YEAR THREE		
Semester-1	Course code	Credit Hours
Critical Care Rotation	PHCL 311	3 (0+0+3)
Infectious disease Rotation	PHCL 312	3 (0+0+3)
Elective Rotation (Nephrology, Endocrinology, Ambulatory Care, General Pediatrics)	PHCL 313-- 316	3 (0+0+3)
Elective Rotation (Nephrology, Endocrinology, Ambulatory Care, General Pediatrics)	PHCL 313 -316	3 (0+0+3)
Total	12	
Program Total Credit Hours	48	

## **CLERKSHIP TRAINING DESCRIPTION:**

Master of Clinical Pharmacy clerkship training prepares students for the health care environment, through monitored guidance and applications of pharmaceutical skills in a wide variety of pharmacy practice settings. The training is structured to facilitate the development of problem-solving skills, planning, coordination, and leadership. Experiences are also uniquely designed to suit the interest and needs of the students. The student develops skills in management and pharmacy administration to prepare residents for future pharmaceutical leadership roles.

The training period is composed of 32 weeks (8months) to be completed over the last two semesters of the program. It consists of four mandatory rotations and four electives to be chosen by the student. Each rotation consists of 4 weeks of training, five days a week, eight contact hours a day. Student will spend 160 hours per month of rotation (8 hours daily X 5 days weekly X 4 weeks), this will give 1280 hours of clinical training during the program ( $160 \times 8 = 1280$  hours). This will be sufficient enough for the required outcome.

**Rotations are illustrated in the following table:**

<b>Course Code &amp; No.</b>	<b>Mandatory Rotation</b>
PHCL 221	Internal Medicine
PHCL 222	Cardiology
PHCL 311	Critical care
PHCL 312	Infectious Disease
<b>Course Code &amp; No.</b>	<b>Elective Internal Medicine Rotation</b>
PHCL 223	Gastroenterology
PHCL 224	Oncology/Hematology
PHCL 225	Emergency Care
PHCL 226	Drug Information & Poison Control Service
PHCL 227	Nutritional Support
PHCL 313	Nephrology
PHCL 314	Endocrinology
PHCL 315	General Pediatrics
PHCL 316	Ambulatory Care

The Clinical Pharmacy component has its training site at the local private hospitals.

The Master of Clinical Pharmacy degree consists of 13 core courses (20 credits), a clinical research project for 4 credits and 8 clinical rotations (four mandatories and four elective rotations) for 24 credit hours (3 credit hours for each rotation). Ibn Sina National College for Medical studies reserves the right to amend or remove courses and unit availabilities, as appropriate.

**The 4 Mandatory rotations are:**

1. Internal Medicine (general)
2. Cardiology
3. Critical care
4. Infectious Diseases

**The Elective rotations: Student will choose 4 elective rotations of the following list:**

1. Gastroenterology
2. Oncology/Hematology
3. Nephrology
4. Endocrinology
5. Ambulatory Care
6. Emergency Care
7. General Paediatrics
8. Drug information and poison control
9. Nutrition Support

**PROGRAM LEARNING OUTCOMES**

The Master Degree in Clinical Pharmacy Learning outcomes (PLOs) are:

<b>MASTER DEGREE PROGRAM LEARNING OUTCOMES (Based on SAQF)</b>	
<b>PLO</b>	<b>At the end of the program the graduate should be able to do:</b>
<b><u>KNOWLEDGE: (THEORIES AND FACTS)</u></b>	
<b>K 1.1</b>	Interpret concepts of basic, clinical, and economic sciences and their application in clinical pharmacy.
<b>K 1.2</b>	Analyze drug therapy of patients with common diseases, life threatening conditions, and critical care situations.
<b>K 1.3</b>	Explain the concepts and techniques of research designs and statistical analysis methods in relation to clinical pharmacy profession.
<b><u>SKILLS: PRACTICAL APPLICATION OF KNOWLEDGE</u></b>	
<b>S 1.1</b>	Apply specialized clinical pharmaceutical knowledge and skills in pharmacy practice.
<b>S 1.2</b>	Implement results of latest research and innovative projects in patient care.
<b>S 1.3</b>	Utilize available technological innovations in pharmacy practice and health care.
<b>S 1.4</b>	Apply concepts and principles of pharmacotherapy and patient safety in decision-making for patient management.
<b><u>COMPETENCIES</u></b>	
<b>C-1: INDEPENDENCE AND RESPONSIBILITIES:</b>	
<b>C 1.1</b>	Scrutinize therapeutic care plans provided by healthcare facilities using evidence-based approaches.
<b>C 1.2</b>	Deal professionally with common and complex issues related to pharmacy profession.
<b>C-2: PROFESSIONAL PRACTICE:</b>	
<b>C 2.1</b>	Manage medication-related problems in healthcare settings.
<b>C 2.2</b>	Create therapeutic care plans on sound principles of evidence-based medicine.
<b>C 2.3</b>	Make effective use of mathematical and statistical models and related technologies in investigating and reporting practice-related issues.

<b>C 2.4</b>	Communicate effectively with patients, healthcare professionals, pharmaceutical industrialists, and the community.
<b>C 2.5</b>	Conduct an independent research project in the field of pharmacy practice.
<b>C-3: PROFESSIONAL FEATURES:</b>	
<b>C 3.1</b>	Collaborate with other members of the healthcare team to achieve optimal patient outcomes across the continuum of care.
<b>C 3.2</b>	Place patients' needs and safety at the heart of therapeutic care plans.
<b>C 3.3</b>	Uphold the highest standards of integrity, honesty, and general Islamic ethics.

### **MASTER PROGRAM TEACHING/LEARNING METHODS**

- ☐ Interactive Lectures
- ☐ Case Presentation and Discussion
- ☐ Self-Directed Learning (SDL)
- ☐ Journal Club
- ☐ Project Based learning
- ☐ Assignments
- ☐ Data Analysis Practical Sessions
- ☐ Skill Lab and Simulation Training Session
- ☐ Clinical training Sessions
- ☐ Hand-On Practical training
- ☐ Role Play
- ☐ Microteaching

## MASTER PROGRAM ASSESSMENT METHODS

- ☐ Multiple choice Questions (MCQs)
- ☐ Modified Essay Questions (MEQ)
- ☐ Short Answer Questions (SAQs)
- ☐ Assessment using Rubrics
- ☐ Students' prepared seminars (by Rubrics)
- ☐ Objective Structured Clinical Examination (OSCE)
- ☐ Assignments
- ☐ Research project evaluation
- ☐ Journal Clun
- ☐ Portfolio
- ☐ Critical Appraisal of Research Paper
- ☐ Case Report

### **Grading and GPA**

The program follow the universal grading system as given below.

Symbol	Mark Limits	Points	Meanings
A+	95-100	5.0	Exceptional
A	90-95	4.75	Excellent
B+	85-90	4.5	Superior
B	80-85	4.0	Very Good
C+	75-80	3.5	Above Average
C	70-75	3.0	Good
D+	65-70	2.5	High Pass
D	60-65	2.0	Pass
F	Less 60	1.00	Fail



## IMPORTANT CONTACTS

No	Name	Contact Number:	
		Male	Female
1.	Secretary for Vice Dean Pharm. D. Program	408	
2.	Maintenance Department	639	132
3.	Admission/Registration	403/106	131
4.	Academic Affairs	222	277
5.	Student Affairs	105	129
6.	Student Support Unit	455	453
7.	Library	110	445
8.	Research Center	441	
9.	Community Service Unit	452	
10.	Finance	175	



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