

MASTER'S DEGREE IN CLINICAL & HOSPITAL PHARMACY

**Department of Clinical Pharmacy
College of Pharmacy
King Saud University
Riyadh, Saudi Arabia**

Introduction

This program is five-semester full-time post-baccalaureate professional degree. Individuals completing the program will be capable of fulfilling advanced clinical and hospital pharmacy practice roles in hospitals, ambulatory care sites, primary care setting, academia, governmental sectors, consulting and other health care agencies. The program is designed so that students develop specific competencies in clinical and experimental therapeutics that are translational among the basic, applied and clinical settings. The program is comprised of two components: three semesters of didactic coursework followed by two semesters of clinical rotations. During the first three semesters, the curriculum provides a greater emphasis on the clinical relevance of research studies while maintaining rigorous instruction in pharmacotherapeutics, pharmacokinetics and hospital pharmacy administration. It also provides the student with a core of professional knowledge and skills in clinical research design and medical and pharmaceutical literature evaluation including the application of statistical analysis and hypothesis testing.

The last two semesters will be devoted to clinical rotations that provide students with the opportunity to apply knowledge acquired in the classroom to the practice of pharmacy in a variety of patient care settings. In addition to refining advanced pharmacy practice skills, students gain confidence in applying evidence-based principles to drug therapy decisions. This period is composed of eight one-month clerkships selected from the following areas:

1. Clinical pharmacy clerkships in selected internal medicine specialties.
2. Therapeutic drug monitoring (TDM)
3. Hospital pharmacy administration,

Concurrently, the M.S. candidate must complete a research project that is of publishable quality to satisfy the degree requirements.

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I. Overall Objectives:

The objective of the M.S. program is to encourage and facilitate the development of advanced pharmacy practitioners capable of conceiving, implementing, and evaluating patient care services that promote the rational, safe, effective, and economical use of drug therapy. As such, the program is structured to produce graduates that exemplify the highest standards of practice and that demonstrate a commitment to excellence and a dedication to optimizing patient care. As a foundation for achieving this level of performance, the program is designed to nurture and enhance student's knowledge in concepts and principles of pharmacotherapeutics, pharmacokinetics, pharmacoeconomics, drug literature retrieval and interpretation, and clinical research design and evaluation.

II. Prerequisites for Admission

A bachelor's degree in pharmacy or its foreign equivalent from a recognized college of pharmacy with minimal overall grade of "good" (cum. GPA>3.25) is required. Applicants graduated from King Saud University (KSU) must have completed all courses required for the professional pathway either in Clinical Pharmacy or Hospital Pharmacy with, at least, a grade of "good". A written examination and an interview with the Graduate Program Committee may be required prior to acceptance if deemed necessary by the department. The potential candidate will be evaluated based on his/her demonstration of interest, leadership, quality of performance in the professional activities including education, service, and research. A provisional acceptance of an applicant with either grade or course deficiency may be considered by the department and the Faculty board. In addition, the applicant must meet all the requirements according to the general regulations governing admission to graduate studies as set by the King Saud University, College of Graduate Studies.

III. Study Requirements:

The M.S. Degree in Clinical & Hospital Pharmacy program has five-semester curriculum to be completed in a three-year period. Exceptions for additional time to complete the program course work will only be considered by the Department under special circumstances (i.e., illness, military obligations.. etc.). The program work will be completed in KSU College of

Pharmacy and hospitals affiliated with the College teaching program. The M.S. candidate must complete 27 credit hours of didactic lecture and seminar courses; 24 credit hours of experimental clerkship training courses; and 3 credit hours for the research project. The student will be evaluated in theoretical knowledge base by written examination for each required course and in skill achievements by continuous assessment and examinations for the experiential clerkship courses. The student's research project will be judged on the basis of the appropriateness of the hypothesis and research design, completeness of the background literature review, execution of the research methodology and data collection, appropriateness of the conclusion drawn from statistical inferences, and discussions of the findings, conclusions, significance and future research needs.

IV. Methods of Training:

The M.S. Degree program is designed to have four modes of training methods:

1. Formal lectures, practical, and seminars in a classroom setting;
2. Professional experiential clerkships under continuous supervision in a hospital environment;
3. Research activities under faculty supervision in a hospital and/or laboratory setting;
4. Oral presentation and written report of a research project that is of publishable quality.

V. General Course Titles and Clerkship Rotations:

Didactic courses:

PHCL	501	Advanced Therapeutics-1	3+1
PHCL	502	Advanced Therapeutics-2	3+1
PHCL	503	Advanced Therapeutics-3	3+1
PHCL	505	Clinical Immunology	2+0
PHCL	510	Advanced Pharmacokinetics	1+1
PHCL	520	Research Design	2+0
PHCL	525	Literature Evaluation & Evidence-based Medicine.	2+0
PHCL	530	Advanced Hospital Pharmacy System	3+0

PHCL	540	Advanced Hospital Pharmacy Management	2+0
PHCL	570	Research Project	0+3
PHCL	590	Clinical & Hospital Pharmacy Seminar-1	0+1
PHCL	591	Clinical & Hospital Pharmacy Seminar-2	0+1

Clinical Clerkship courses:

PHCL	511	Therapeutic Drug Monitoring (TDM-1) (Obligatory Rotation)	0+3
PHCL	512	Therapeutic Drug Monitoring (TDM-2)	0+3
PHCL	513	Therapeutic Drug Monitoring (TDM-3)	0+3
PHCL	521	Advanced Drug Information Services (Obligatory Rotation)	0+3
PHCL	531	Hospital Pharmacy-1 (Operations) (Obligatory Rotation)	0+3
PHCL	532	Hospital Pharmacy-2 (Administration)	0+3
PHCL	541	Hospital Pharmacy-1(Committees)	0+3
PHCL	550	Internal Medicine (Pulmonary Service)	0+3
PHCL	551	Ambulatory care	0+3
PHCL	552	Gastroenterology (Obligatory Rotation)	0+3
PHCL	553	Endocrinology	0+3
PHCL	554	Cardiology (Obligatory Rotation)	0+3
PHCL	555	Oncology	0+3
PHCL	556	Rheumatology	0+3
PHCL	557	Infectious Disease	0+3
PHCL	558	Pediatrics	0+3
PHCL	559	Surgery & Critical Care	0+3

The M.S. candidate must complete the five designated obligatory rotations and three additional rotations selected with coordination with the department.

VI. Course Distribution:

Semester-1

1. PHCL 501 (3+1)
2. PHCL 510 (1+1)
3. PHCL 530 (3+0)
4. PHCL 590 (0+1)

(7+3)

Semester-3

1. PHCL 503 (3+1)
2. PHCL 525 (2+0)
3. PHCL 540 (2+0)
4. PHCL 591 (0+1)

(7+2)

Semester-5

1. Clerkship-5 (0+3)
2. Clerkship-6 (0+3)
3. Clerkship-7 (0+3)
4. Clerkship-8 (0+3)

(0+12)

Semester-2

1. PHCL 502 (3+1)
2. PHCL 505 (2+0)
3. PHCL 520 (2+0)
4. PHCL 570 (0+3)

(7+4)

Semester-4

1. Clerkship-1 (0+3)
2. Clerkship-2 (0+3)
3. Clerkship-3 (0+3)
4. Clerkship-4 (0+3)

(0+12)

For more information, please contact:

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