



**HEALTH SERVICES ACADEMY, ISLAMABAD
COURSE SYLLABUS & POLICIES**

Course title	Clinical Pharmacy
Instructors	Dr. Ahmed Hussain Tariq (Associate professor) Health Services Academy Dr. Salwa (Chief Pharmacist) Shifa International Hospital Islamabad
Instructor CV/Profile	
Course Fee	Pakistani Candidates: PKR 120,000/- Overseas Candidates: USD accordingly

Class details	
Class Timing and Room	Online
Session Day(s)	Weekdays

Course Description
<p>This Clinical Pharmacy course offers a mix of clinical, applied practice, public health, and research units, giving you the knowledge and skills to be an excellent clinical pharmacist. You will also cover applied practice topics including health economics, public health pharmacy practice research, training others, and organizational influences on healthcare.</p>

Course Learning Outcomes

Knowledge Outcomes

- The course should equip registered pharmacists with the fundamental knowledge and skills to enhance career opportunities as clinical or consultant (medication review) pharmacists.
- Advanced knowledge and understanding of the management of a range of acute and chronic conditions.

Abilities Outcomes

- Represent the mandatory role of the pharmacy profession in the different areas of practice.
- Conduct clinical research, and criticize and interpret the published literature.

Skills Outcomes

- Retrieve and professionally communicate the optimum up-to-date management plans for different disease areas with the healthcare team members.
- communicate with the patient for proper education and counseling related to drug therapy.
- skills in medicines optimization the ability to communicate with a range of healthcare professionals to promote the appropriate use of medicines;
- skills in the critical evaluation of a range of health services literature

Course Objective

This course will provide a formal training program for pharmacists to provide clinical services. The course will support rural pharmacists in becoming accredited to conduct medication reviews and enhance their role as a member of the health care team. It will develop their ability to communicate effectively with other health professionals and patients. The course also aims to provide a pathway toward a Research Higher Degree.

Teaching and Learning Methodology

This course will build on presentations, videos, readings, case studies, and assignments. Self-study, case discussions, interaction, and implementation Strategies to practice and application in the subject area are all included in this course.

- Self-Assessment:
- Interaction between students and instructors via the internet.
- Discussing selected questions, locating examples, responding to queries, and so on.
- Discussions in groups
- Work on a group project to practice and apply concepts.
- Final report/project, as well as a discussion on a chosen topic.

Course Plan				
Session	Chapters	Session Topic	Assessments	%
1	Introduction to clinical pharmacy	<p>Introduction</p> <ul style="list-style-type: none"> • Define clinical pharmacy • Differentiate between traditional pharmacist role & Clinical pharmacist • Clinical pharmacist responsibility & daily work activity • Define therapeutic drug monitoring and its types. 		
2	Foundations of Clinical Pharmacy	<ul style="list-style-type: none"> • General guidelines for clinical pharmacy practice • Patient counseling compliance • Laboratory data interpretation • Electrolytes management • Clinical literature evaluation • Drug interactions • Medication errors 		
3	Patient profile & patient counseling	<ul style="list-style-type: none"> • Patient disease profile • Taking case history • Drug profile of at least important medications e.g. <ul style="list-style-type: none"> • Adrenaline • Aminoglycosides • Anti TB drugs etc. • Patient counseling 		
4	Clinical trials of drug substances	<ul style="list-style-type: none"> • Designing of clinical trials • Types of trials • Choice of patients • Exclusion of patients and monitoring a clinical trial 		

5	Drug interactions	<ul style="list-style-type: none"> • Mechanism • Physiological factors affecting interaction • Types and levels of drug interactions • Role of pharmacist in evaluating drug interaction & its management 		
6	Medicines Optimization and Therapeutics	<ul style="list-style-type: none"> • Pharmacovigilance • Adverse drug reactions and side effects • Excessive pharmacological response • Idiosyncrasy • Secondary pharmacological effects • Allergic drug reactions • Detection • Management of ADR • Reporting of ADR in light of international health monitoring system 		
7	Individual Project Reports	<ul style="list-style-type: none"> • Dissertation & Oral Presentations 		

**Prerequisite Skills and Knowledge to Take this
Course**

Academic Conduct

At HSA academic honesty is mandatory. Absolutely no plagiarism/ cheating in any examination, quiz, assignment, report, and/or presentation by any student is tolerated.

Attendance Policy

- Students are required to regularly attend all lectures, seminars, and fieldwork as may be specified. In case, a student accumulates more than the allowed number of absences, he/she will not be eligible for the Diploma for Professional Development.
- The provision of absences is only for emergencies.
- If absent on the final examination the certificate will not be issued.
- Students who are unable to appear for the final exam are required to submit a written application stating the reason for not appearing for the exam. HSA reserves the right to approve or deny such applications. If approved, the student will be allowed to sit for the exam within one month. Failure to do so, the student will only be given a Certificate of Attendance.
- The attendance on the first day of the Diploma is a must.
- A student must attend 80% of the classes to be eligible for the certificate.
- Students are required to be in time for their sessions. After 10 minutes of the start of class, the entrant will be marked late.
- Maximum of 4 late attendances will be allowed. The decision will be made by the faculty.
- It is expected that the students will always maintain a proper dress code.

CONDUCT AND DISCIPLINE

A disciplinary action, leading to rustication, will be taken against students whose conduct is found objectionable at any time during the study. The faculty and Vice-Chancellor HSA will be the decision-maker.

**EVALUATION AND
GRADING**

The performance of participants is evaluated through continuous observation of the student's performance in the Diploma – the extent to which he/she participates in discussions and the case studies and exercises.

There will be quizzes, monthly hourly exams, and final exams at the end of the program. The total marks for passing the Diploma will be 60 out of a total of 100 marks.

Participants, who do not meet attendance or any other eligibility criteria, will not be allowed to appear in the final examination.

In the rating of participants, the following grading plan is used:

A+	95 - 100
An	87 - 94
B+	81 - 86
B	72 - 80
C+	66 - 71
C	60 - 65
F	below 60 (Fail)

