

Pharmacology

Course No.	Title of Course	Credit Hours
PHM-111	Pharmacology	3(3-0)

Learning Outcomes

After completing the course, the students will be able to:

- Explain basic knowledge of pharmacology including administration, physiologic response.
- Assess adverse effects of drugs under normal and pathologic conditions.
- Manage drugs rehabilitation in patient/client.

SDGs addressed in the course:

SDG # 3 (Health and Well-being)

Teaching Mode:

This portion of contents and will be taught in hybrid learning mode offering a substantial portion of contents and course activities online through learning management system.

Course Content

Theory

Basic Principles of Pharmacology and pharmacokinetics; Drug Administration, absorption. And Distribution; Drug Elimination; Drug Receptors; Pharmacology of the central nervous system: Central nervous system pharmacology, general principles, sedative-hypertonic and anxiety agents; drugs used to treat affective disorders; Depression and manic depression; Antipsychotic drugs, Antiepileptic drugs; Pharmacologic management of Parkinson disease; General anesthetics; Local anesthetics; Drugs affecting skeletal muscle and skeletal muscle relaxants; Drugs used to treat pain and inflammation: Opioid analgesics, non-steroidal anti-inflammatory drugs (NASID); Pharmacologic management of rheumatoid arthritis and osteoarthritis; Patient-controlled analgesia; Autonomic and cardiovascular pharmacology: Introduction to autonomic pharmacology, cholinergic drugs, adrenergic drugs, antihypertensive drugs; Treatment of angina pectoris; Treatment of cardiac arrhythmias; Treatment of congestive heart failure; Treatment of coagulation disorders and hyperlipidemia.

Table 5: Week wise Lecture Plan:-pharmacology-1

Week No	Description
1.	Basic Principles of Pharmacology and pharmacokinetics
2.	Drug Administration, absorption. And Distribution; Drug Elimination; Drug Receptors
3.	Pharmacology of the central nervous system: Central nervous system pharmacology, general principles
4.	sedative-hypertonic and anxiety agents; drugs used to treat affective disorders; Depression and manic depression
5.	Antipsychotic drugs, Antiepileptic drugs
6.	Pharmacologic management of parkinson disease;
7.	Mid semester Exams
8.	General anesthetics; Local anesthetics; Drugs affecting skeletal muscle and skeletal muscle relaxants
9.	Drugs used to treat pain and inflammation: Opioid analgesics, nonsteroidal anti-inflammatory drugs (NASID)
10.	Pharmacologic management of rheumatoid arthritis and osteoarthritis; Patient-controlled analgesia
11.	Autonomic and cardiovascular pharmacology: Introduction to autonomic pharmacology, cholinergic drugs, adrenergic drugs, antihypertensive drugs;
12.	Treatment of angina pectoris; Treatment of cardiac arrhythmias, Treatment of congestive heart failure
13.	Treatment of coagulation disorders and hyperlipidemia.
14.	Final Semester Exams

Text Book:

1. Cheema, M. 2015. Textbook of pharmacology and therapeutics. Publication, Lahore, Pakistan

Suggested Readings:

1. Ciccone, C.D. 2015. Pharmacology in rehabilitation. F.A. Davis, Philadelphia, PA, USA.
2. Finkel, R. M.A. Clark and L.X. Cubeddu. 2015. Pharmacology. Lippincott Williams and Wilkins, Philadelphia, PA, USA
3. Heinz, L., K.Mohr, L.Heiin and D.Bieger. 2005. Color Atlas of Pharmacology. Thieme, 3rd Ed. Stuttgart, NY, USA

