



Medicinal Chemistry-III
Title: Medicinal Chemistry-III
Subject code: 422 PHC
Semester: Eighth Semester (Fourth year).
Duration: 2 + 1 Units (5 contact hours) per week.
Aims: To enable the student to know the chemistry and mode of action of drugs acting as antibacterials, antivirals, antifungals, antiparasitics and anti-neoplastics.
Objectives: At the end of the course the student should understand the chemistry and mode of action of drugs acting as antibacterials, antivirals, antifungals, antiparasitics and anti-neoplastics.
Contents: Chemistry of antibiotics (□ lactams, tetracyclines, macrolides, rifamycins, chloramphenicol, aminoglycosides, antifungal and polypeptide), antibacterials, anti-mycobacterials, antivirals, antifungals, antimalarials, anthelmintics, antiscabious, antipedicular agents, antileprotic agents, antiprotozoals, antibilharzial agents and anti-neoplastics. Drug design for related drugs.
Practical: Quantitative determination of selected drugs either in crude form or in different pharmaceutical dosage forms including: titrimetric, potentiometric, spectrophotometric and chromatographic methods of analysis.
Minimum course requirements: 30 (2 x 15) Unit lectures and 45 (3 x 15) practical hours per level.
Evaluation methods:



- Quizzes	10%
- Mid term examination	25%
- Practical examinations	25%
- Final examination (written)	40%

Text Books (latest editions):

- 1- Principles of Medicinal Chemistry, W.O. Foye, T. L. Lemke, David A Williams.
- 2- Essentials for Pharmaceutical Chemistry, Donald Cairns, Principal Pharmacist, Kent and Canterbury.

Recommended books (latest editions):

- 1-An Introduction to Medical Chemistry, Graham L. Patrick.
- 2-Medicinal Chemistry: An Introduction T.B., G. Thomas, Wiley, John Wiley.
- 3-A Text book for Medical Chemistry, P. Parimoo.
- 4- Medicinal Chemistry, C.R. Anellin.
- 5- Pharmaceutical Chemistry, M.B.Christine.
- 6- Wilson and Gisvold's Textbook of Organic Medicinal and Pharmaceutical Chemistry.