

Course Title: Medicinal Chemistry

Semester: VIII

Course Code: CH-477

Credit Hours: 3-0

Prerequisite: Nil

Course Objectives

1. Students will acquire knowledge and learn about the nature, types and properties of drugs and medicines, and the role of an organic chemist in drug designing and drug discovery.

Course Contents

2. Chemistry of biomolecules; introduction to drugs and drug discovery, sources of therapeutic agents, structure activity relationship (SAR), drug-receptor interaction, drug formulation and its methods, different types of drugs; chemistry and modes of action of some common drugs.

Course Outcomes

3. After studying this course, students will be able to know about structure, properties, synthesis and mechanism of action of various drugs.

Text book

4. Williams, D. A. and Lemke, T. L., Foye's Principles of Medicinal Chemistry, 6th ed., Lippincott Williams & Wilkins, New York, (2008).

5. Recommended Books:

- a. Paul, M. D., Medicinal Natural Products: A Biosynthetic Approach, 3rd ed., Medicinal Natural Products, John-Wiley & Sons, Ltd, (2009).
- b. Wolff, M. E., Burger's Medicinal Chemistry, 4th ed., Part III, John-Wiley & Sons, New York, (2006).
- c. D. Sriram, P. Vogeewari, Medicinal Chemistry, 2nd ed., BITS Pilani, Pearson, Publisher: Darling Kindersley, India, (2010).
- d. Carins D., Essential of Pharmaceutical Chemistry, 3rd ed., Pharmaceutical Press, London, (2008).