

The unit aims to provide you with an introduction to the basic chemical principles that underpin understanding of the bonding interactions that hold drug molecules together, the structures and reactivities of carbon based compounds, and the specificities of drug-target interactions. In the practical element of this module you will be introduced to basic organic synthesis techniques. In the second semester you will build on your chemical knowledge and will be introduced to fundamental cellular structure, function and biochemistry. The biological and chemical properties of each of the major classes of cellular (life) molecules are presented, together with details of some of the essential processes in which they are involved.

2019/0 - PHAP5001Y DRUG DESIGN AND MECHANISMS OF DRUG ACTION

Full Year, Level 5 module
(Maximum 0 Students)

UCU: 30

Organiser:

Module Type: Examination with Coursework or Project

Exam Paper(hrs):

This module will provide underpinning medicinal chemistry principles and relate this to drug design, mechanism of action and metabolism. Students will be instructed in basic organic synthesis as well as complementary spectroscopic techniques. Gain knowledge of the underpinning medicinal chemistry principles and understand how this relates to drug design, mechanism of action and metabolism. You will be instructed in basic organic synthesis as well as complementary spectroscopic techniques. This module extends students' knowledge of organic chemistry reactions and mechanisms and their application in drug design and discovery. Students will be introduced to analytical techniques used to monitor reactions and assess drug purity and purification methods. Through case studies, practical laboratory sessions and lectures by speakers from the pharmaceutical industry students will evaluate and apply this knowledge to real life examples.

2019/0 - PHAP5002Y CHEMISTRY FOR DRUG DISCOVERY

Full Year, Level 5 module
(Maximum 30 Students)

UCU: 30

Organiser: Professor A. Ganesan

MODULE - 40% PASS ON AGGREGATE

Module Type: Coursework

Timetable Slot:U

This module aims to extend your knowledge of organic chemistry reactions and mechanisms and their application in drug design and discovery. You will be introduced to analytical and purification techniques used to monitor reactions and assess drug purity. Through case studies, practical laboratory sessions and lectures by speakers from the pharmaceutical industry, you will evaluate and apply your knowledge to real life examples.

2019/0 - PHAP5011Y CARDIOVASCULAR AND RENAL DISEASES

Full Year, Level 5 module
(Maximum 30 Students)

UCU: 20

Organiser: Dr Derek Warren

MODULE - 40% PASS ON AGGREGATE

Module Type: Examination with Coursework or Project

Timetable Slot:U

Exam Paper(hrs):2

Exam Period:SPR-02

Do you want to build upon your knowledge of pharmacology and peripheral nervous system modules and learn about the physiology of the heart, vascular system and kidney? This module will provide you with a detailed knowledge of the aetiology and pathophysiology of common cardiovascular, cerebrovascular and renal diseases and the pharmacology of associated treatments.