

## MODULE DESCRIPTOR

### Module Title

Principles Of Pharmacology

Reference	PL2910	Version	1
Created	October 2022	SCQF Level	SCQF 8
Approved	June 2023	SCQF Points	15
Amended	August 2021	ECTS Points	7.5

### Aims of Module

To understand and apply principles of pharmacology in the context of disease processes and drug action.

### Learning Outcomes for Module

On completion of this module, students are expected to be able to:

- 1 Explain the basic principles of drug action.
- 2 Explain the absorption, distribution, metabolism and elimination of drugs.
- 3 Discuss the mode of action of selected groups of drugs.
- 4 Manipulate and interpret experimental data and to select and apply appropriate statistical techniques.

### Indicative Module Content

Cell signalling and regulation, G-protein coupled receptors, nuclear hormone receptors, tyrosine kinase receptors, ligand-gated ion channels. Principles of agonist and antagonist drug activity, mechanisms of action relevant to therapeutics and environmental toxicology. Principles of pharmacokinetics including drug administration, bioavailability, ADME (absorption, distribution, metabolism (cytochrome P450) and excretion) and relevant calculations.

### Module Delivery

Lectures with associated tutorials, computer-based exercises and laboratory practicals.

### Indicative Student Workload

	Full Time	Part Time
Contact Hours	40	N/A
Non-Contact Hours	110	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	150	N/A
<i>Actual Placement hours for professional, statutory or regulatory body</i>		

**ASSESSMENT PLAN**

If a major/minor model is used and box is ticked, % weightings below are indicative only.

**Component 1**

Type: Examination Weighting: 100% Outcomes Assessed: 1, 2, 3, 4  
 Description: closed book examination

**MODULE PERFORMANCE DESCRIPTOR****Explanatory Text**

Component 1 (CW1) comprises 100% of the module grade. A minimum of a Grade D is required to pass the module. Non-submission of either component will result in an NS grade.

Module Grade	Minimum Requirements to achieve Module Grade:
<b>A</b>	A
<b>B</b>	B
<b>C</b>	C
<b>D</b>	D
<b>E</b>	E
<b>F</b>	F
<b>NS</b>	Non-submission of work by published deadline or non-attendance for examination

**Module Requirements**

Prerequisites for Module	Successful completion of Stage 1 of the course or equivalent.
Corequisites for module	None.
Precluded Modules	None.

**INDICATIVE BIBLIOGRAPHY**

- 1 HARVEY, R.A. et al. *Lippincott's Illustrated Reviews: Pharmacology*. Current Edition. Wolters Kluwer
- 2 GOLAN, D.E. et al. *Fundamental Principles of Pharmacology: The Pathophysiologic Basis of Drug Therapy*. Current Edition. Wolters Kluwer.
- 3 GOLAN, D.E. et al. *Principles of Pharmacology*. Current Edition. Baltimore: Lippincott, Williams and Wilkins.