

Module Specifications

Year/Level:

Year 1/ Level 4

Programme:

MPharm

Module:	Foundations of Pharmaceutical Chemistry	Module Code:	4FHH2000	Credits:	30
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Module Description:	Mandatory
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A foundation module that will cover essential areas of nomenclature, and physical, structural, and organic chemistry. Topics covered include a study of the key organic functional groups, basic kinetics and thermodynamics, and an introduction to fundamental concepts in pharmaceuticals. The module provides the underpinning pharmaceutical chemistry, presented in a contextualised manner,

Year/Level:

Year 1/ Level 4

Module:	Fundamentals of Analytical Chemistry	Module Code:	4FHH2001	Credits:	30
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Module Description:	Mandatory
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This module covers the fundamentals of analytical chemistry with respect to theory, essential tools and calculations, the principles of qualitative and quantitative analyses. The module provides the basics of analytical chemistry, presented in a contextualised manner, necessary to support other modules studied on the programme.

Year/Level:

Year 1/ Level 4

Module:	Human Physiology and Pharmacology	Module Code:	4FHH2002	Credits:	30
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Module Description:	Mandatory
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This module has been designed to provide students with an understanding of human physiology, enabling them to describe physiological processes at cell, tissue, organ and organism levels.

Topics covered will include:

Homeostasis and control mechanisms

Cell differentiation, basic tissues and musculature

Nervous system (electrical signalling, autonomic nervous system and central nervous system)

Cardiovascular system and blood

Respiratory system

Digestive system

Renal system

Endocrine system and reproduction

Immune system

Integrative physiology

Basic pharmacology including receptor theory and pharmacokinetics to show how medicines may be effectively used to treat disease.

Drug discovery, design and the process of drug development. The importance of clinical trials.

Year/Level:

Year 1/ Level 4

Module:	Biology and Biochemistry	Module Code:	4FHH2003	Credits:	30
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Module Description:	Mandatory
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This module provides the students with a contextualised introduction to the fundamentals of biochemistry, molecular and cell biology, and their applications in the advancement of pharmaceutical sciences. The module introduces students to the fundamental structure of prokaryotic and eukaryotic cells. Topics covered include: cell structure and their components; membrane organisation and transport; DNA organisation and replication; gene transcription and translation; protein structure; enzyme kinetics; cell signalling; cell biochemistry and metabolism; introduction to microbiology; eukaryotic genetics; an introduction to differentiation/development; and basic molecular biological techniques.