

Summary Information

Module Code	4103NRS
Formal Module Title	Biosciences in Nursing Practice
Owning School	Nursing and Allied Health
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 4
Grading Schema	40

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Donal Deehan	Yes	N/A

Module Team Member

Contact Name	Applies to all offerings	Offerings
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Partner Module Team

Contact Name	Applies to all offerings	Offerings
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Teaching Responsibility

LJMU Schools involved in Delivery
Nursing and Allied Health

Learning Methods

Learning Method Type	Hours
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Lecture	20
Workshop	20

Module Offering(s)

Offering Code	Location	Start Month	Duration
SEP-CTY	CTY	September	12 Weeks

Aims and Outcomes

Aims	To provide nursing students with an overview of human body systems that inform skills for nursing practice. To develop an overview of psychosocial concepts in relation to well-being, disease and illness.
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Learning Outcomes

After completing the module the student should be able to:

Code	Description
MLO1	Understand how homeostasis is maintained in the human body across the lifecycle
MLO2	Explore biopsychosocial factors that influence human development, illness, disease and well-being
MLO3	Describe the key pathophysiological mechanisms underlying a range of common disorders.
MLO4	Identify the pharmacological processes associated with drugs used to treat a range of common disorders

Module Content

Outline Syllabus

Basic structure across the lifespan of all major body systems and their functions in maintaining homeostasis: Cardio-vascular, Respiratory, Neurological, Urinary systems, Fluid and Electrolyte Balance, Acute Renal Failure, Digestive System, Endocrine System, Diabetes Mellitus (Type 1 and 2), Reproductive System, Introduction to Blood, Introduction to Skin and Temperature Regulation and Musculoskeletal System Basic processes underlying the changes in structure and function of the body across the lifecycle: Introduction to common illnesses from childhood to end of end of life. Terms and concepts relating to human structure and function. Organisation of the Body Basic chemistry - from molecules to cells to homeostasis Inflammation and body defences. Introduction to Pain Biopsychosocial factors influencing development across the lifespan, health and illness: Introduction to common mental health conditions. Psychological models of behaviour. Developmental psychology, abnormal psychology Person centred assessments and care plans History of mental health. Theories of Mental distress; Classification of Mental Disorder; Descriptive Psychopathology Social models of health Developmental Anatomy and Physiology Pre-Natal influences on health Growth, development and ageing Sexual Health Basic principles of microbiology and infection control Pathophysiological mechanisms underlying a range of common Disorders: Signs and symptoms Investigating and diagnosing illness Basic principles of pharmacology in relation to the mechanism of action of drugs used to treat a range of common disorders: Concepts and terms in pharmacology and pathophysiology; Causes and effects of illness Basic Pharmacology and psychopharmacology Introduction to side effects of Medication, polypharmacy, Iatrogenesis Introduction to substance abuse; Pharmacology of substance abuse and altered consciousness; effects of psychoactive substances Clinical skills including: fluid input output, person centred care, NEWS/PEWS, device safety, first aid, BLS (mandatory), medication administration, A-E assessment, medication administration Bacteriology, virology and parasitology Biophysics, biochemistry and radiology

Module Overview

This module provides you with an overview of human body systems that inform skills for nursing practice. You will develop an overview of psychosocial concepts in relation to well-being, disease, and illness. Though primarily lecture-based, you will engage in a range of other activities including small group classes, clinical skills sessions, simulated practice sessions, online learning, and presentations.

Additional Information

In addition to the contact hours above there are 158 private study hours. 100 hours are guided, this includes online and assessment preparation. Online hours are e-learning. 60 hours are independent study. Please note that workshop hours account for simulated theoretical learning, in accordance with NMC standard 3.4

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Learning Outcome Mapping
Exam	Short answer questions and MCQ	100	2	MLO2, MLO4, MLO3, MLO1