



STUDENT AND ACADEMIC SERVICES

MODULE SPECIFICATION

| Part 1: Basic Data | | | | | |
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| Module Title | Nursing Biosciences | | | | |
| Module Code | UZZY3B-15-3 | Level | 3 | Version | 1 |
| Owning Faculty | Health and Applied Sciences | Field | Mental Health and Learning Disabilities | | |
| Department | Nursing and Midwifery | | | | |
| Contributes towards | MSc Nursing (Adult) MSc Nursing (Mental Health) | | | | |
| UWE Credit Rating | 15 | ECTS Credit Rating | 7.5 | Module Type | Standard |
| Pre-requisites | None | | Co- requisites | None | |
| Excluded Combinations | None | | Module Entry requirements | None | |
| Valid From | September 2017 | | Valid to | | |

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| CAP Approval Date | 5 April 2017 |
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| Part 2: Learning and Teaching | |
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| Learning Outcomes | <p>For this module the student cohort will be taught as a group with opportunities to join field specific seminars and lectures facilitated parallel on the respective BSc pathways.</p> <p>On successful completion of this module students will be able to:</p> <ul style="list-style-type: none"> • Identify physiological needs and key processes necessary for maintaining homeostasis (Component A) • Describe the structure and function of cells, tissues and physiological systems and the complex nature of their interactions (Component A) • Coherently demonstrate understanding of the role of genes in health and in the manifestation, modification and prevention of disease relevant to nursing practice (Component A) • Demonstrate comprehensive knowledge and understanding of the ways health sciences inform nursing practice (component A) • Demonstrate a sound understanding of how the human functions in health, and ill-health (component A) • Demonstrate a competent understanding of pharmacology including pharmacodynamics and pharmacokinetics, commonly used medicine groups and their actions, uses, side effects, and nursing implications (Component A) |

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| Syllabus Outline | <p>Homeostasis and health: levels of organisation in the human body, cell structure and function, integrated functioning of organ systems, principles of homeostasis, structure and function of skin</p> <p>Body fluids and transport: blood and other body fluids, structure and functions of heart and blood vessels, control of blood pressure, hydration, physiology of shock</p> <p>Feeding and nutrition: regulation of eating and swallowing, principles of nutrition, physiology of the digestive system, structure and functions of liver</p> <p>Movement and stability: control of posture and movement, bones, joints and skeletal muscle physiology</p> <p>Respiration: respiratory structures, ventilation, gas exchange, control of breathing</p> <p>Excretion: kidney function, control of fluid balance, biological basis of continence</p> <p>Communication and control: structure and function of different divisions of the nervous system, structure and functions of the nerve cells, synapses and neurotransmission, roles of hormones, physiology of stress</p> <p>Pain: physiology of pain and pain pathways, pain theories, physiological basis of pharmacological therapies and non-pharmacological strategies to manage pain</p> <p>Growth and development: cell proliferation, life cycle changes, brain development, biology of ageing, reproductive physiology, introduction to genetics</p> <p>Sleep and rest: functions and the physiology of sleep, sleep patterns, physiological basis for interventions that promote sleep</p> <p>Defence mechanisms: introduction to micro-organisms; introduction to immunology, non-specific immune response, cell-mediated immunity and humoral immunity</p> <p>Pharmacology: principles of pharmacodynamics and pharmacokinetics, commonly used medicine groups and their actions, uses, side effects, and nursing implications</p> |
| Contact Hours | A total of 36 hours in the form of seminars/workshops, lectures and online activities. The module will also take advantage of virtual learning environments (VLEs) and technology enhanced learning activities including, for example, podcasts. |
| Teaching and Learning Methods | <p>A variety of approaches will be used which may include:</p> <ul style="list-style-type: none"> • Lectures • Seminars • Lecturer facilitation and support • Workshops • Service user and carer perspectives • Directed and independent learning • Reflective approaches to learning |
| Key Information Sets Information | Key Information Sets (KIS) are produced at programme level for all programmes that this module contributes to, which is a requirement set by HESA/HEFCE. KIS are comparable sets of standardised information about undergraduate courses allowing prospective students to compare and contrast between programmes they are interested in applying for. |

| Key Information Set - Module data | | | | |
|--|---|-------------------------|-----------------------|-----------------|
| Number of credits for this module | | | | 15 |
| Hours to be allocated | Scheduled learning and teaching study hours | Independent study hours | Placement study hours | Allocated Hours |
| 150 | 36 | 114 | 0 | 150 |

The table below indicates as a percentage the total assessment of the module which constitutes a -

Written Exam: Unseen exam

Please note that this is the total of various types of assessment and will not necessarily reflect the component and module weightings in the Assessment section of this module description:

| Total assessment of the module: | |
|--------------------------------------|------|
| Written exam assessment percentage | 100% |
| Coursework assessment percentage | 0% |
| Practical exam assessment percentage | 0% |
| | 100% |

Reading Strategy

Core readings

Students will be expected to purchase one or more of the core texts. The module handbook will include which text(s) should be purchased. Copies of core texts will be provided in the library stock. The module handbook will also reflect the range of reading to be carried out.

Further readings

Further reading will be provided as lecture handouts, guided learning activities and as digitised articles where free electronic access is not available. All students are encouraged to read widely using the library catalogue, a variety of bibliographic and full text databases and Internet resources. Many resources can be accessed remotely. Guidance to some key authors and journal titles available through the Library will be given in the module handbook and updated annually. Assignment reference lists are expected to reflect the range of reading carried out.

Access and skills

Formal opportunities for students to develop their library and information skills are provided within the induction period and their Academic Personal Tutor. Additional support is available through the Library Services web pages, including interactive tutorials on finding books and journals, evaluating information and referencing. Sign-up workshops are also offered by the Library.

Indicative Reading List

Indicative Reading List:

Blows, W. T. (2011) *The Biological Basis of Mental Health Nursing*. 2nd Ed. London: Routledge.

Marieb, E.N. and Hoehn, K. (2013) *Human Anatomy and Physiology*. 9th ed. London: Pearson.

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| | <p>Saladin, K.S. (2010) <i>Anatomy and Physiology: the Unity of Form and Function</i>. 5th ed. London: McGraw-Hill Higher Education.</p> <p>Shier, D.; Butler, J. and Lewis, R. (2013) <i>Hole's Human Anatomy and Physiology</i>. 13th Edition. New York: McGraw-Hill.</p> <p>Van Putte, C. L., Regan, J.L. and Russo, A.F. (2013) <i>Seeley's essentials of anatomy and physiology</i> 8th Ed. London: McGraw-Hill.</p> <p>Journals Biological Sciences Review British Journal of Nursing Nursing Standard</p> <p>Database Anatomy & Physiology Online</p> |
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| Part 3: Assessment | |
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| Assessment Strategy | <ul style="list-style-type: none"> Component A, (controlled condition) will take the form of a 1.5 hour multiple choice and short answer examination. This format of examination will enable assessment across the module learning outcomes to ensure students have a broad, detailed and field specific understanding of the core concepts in physiology and pharmacology. The opportunities for formative assessment will include on-line multiple choice questions which will provide instant feedback for students. The seminars will provide opportunities for students to apply physiology and pharmacology concepts to case studies from their field of practice. Small group activities and short presentations within seminars will provide opportunities for formative assessment by peers and academic staff. |

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| Identify final assessment component and element | A | |
| % weighting between components A and B (Standard modules only) | A: 100% | B: |
| First Sit | | |
| Component A (controlled conditions) Description of each element | Element weighting (as % of component) | |
| 1. Exam (1.5 hours) | 100% | |

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| Resit (further attendance at taught classes is not required) | | |
| Component A (controlled conditions) Description of each element | Element weighting (as % of component) | |
| 1. Exam (1.5 hours) | 100% | |
| <p>If a student is permitted an EXCEPTIONAL RETAKE of the module the assessment will be that indicated by the Module Description at the time that retake commences.</p> | | |

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| First CAP Approval Date | 5 April 2017 | | | |
| Revision CAP Approval Date | | Version | 1 | Link to MIA 10632 |