

# Unit Outline (Higher Education)

Institute / School: Institute of Health and Wellbeing

Unit Title: Nursing Context 7: Pathophysiology and Pharmacology Applied to

Person-Centered Nursing Practice B

Unit ID: NURBN2027

Credit Points: 15.00

Prerequisite(s): Nil

**Co-requisite(s):** (NURBN2026)

Exclusion(s): Nil

**ASCED:** 060301

## **Description of the Unit:**

This course focuses on pathophysiology and pharmacology for nursing care. In this course students will have the opportunity to extend their knowledge and skills in relation to the pathophysiology of the National Health Priority areas of endocrine; hepatic/immune; renal; reproductive systems; and the special senses throughout the lifespan. Students will gain a comprehensive understanding of each of the National Health Priority areas by examining the aetiology, pathophysiology, assessment, diagnostic testing (haematology, biochemistry, microbiology, medical imaging) and pharmacology related to commonly encountered disease states. Students will be expected to identify safe, effective, evidence-based pharmacological interventions and strategies for management and treatment of commonly identified conditions.

**Grade Scheme:** Graded (HD, D, C, P, MF, F, XF)

**Work Experience:** 

No work experience

Placement Component: No

Supplementary Assessment: Yes

Where supplementary assessment is available a student must have failed overall in the Unit but gained a final mark of 45 per cent or above, has completed all major assessment tasks (including all sub-components where a task has multiple parts) as specified in the Unit Description and is not eligible for any other form of supplementary assessment.



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#### **Course Level:**

| Level of Unit in Course | AQF Level of Course |   |   |   |   |    |
|-------------------------|---------------------|---|---|---|---|----|
|                         | 5                   | 6 | 7 | 8 | 9 | 10 |
| Introductory            |                     |   |   |   |   |    |
| Intermediate            |                     |   | ~ |   |   |    |
| Advanced                |                     |   |   |   |   |    |

#### **Learning Outcomes:**

## **Knowledge:**

- **K1.** Critically examine and explain the pathologic effects of selected disease processes at the cellular and systemic levels for the endocrine; hepatic/immune; renal; reproductive systems; and the special senses
- **K2.** Identify and assess appropriate/inappropriate responses to therapy
- **K3.** Identify the roles of the professional nurse in relation to medication administration and education
- **K4.** Analyse and describe characteristics of major groups and selected individual medications in terms of the following: mechanism(s) of action; drug effects; therapeutic uses; side effects and adverse effects; toxicity and management of overdoses; interactions; and nursing responsibilities related to administration, monitoring, and teaching

## **Skills:**

- **S1.** Use the clinical reasoning cycle to understand the connection between pathophysiological and pharmacological principles as a basis for nursing practice
- **S2.** Critically evaluate for the presence and effects of compensatory mechanisms in response to major physiological alterations
- **S3.** Assess pathophysiological basis of delirium resulting from for the endocrine; hepatic/immune; renal; reproductive systems; and the special senses

# Application of knowledge and skills:

- **A1.** Interpret diagnostic tests in relation to objective and subjective symptomatology
- **A2.** Apply pathophysiological concepts of disease to the management of commonly occurring conditions across the life span
- **A3.** Apply pharmacological concepts of treatment for commonly occurring conditions across the life span

## **Unit Content:**

The current NMBA Registered Nurse Standards for Practice, NMBA Code of Conduct for Nurses, Code of Ethics for Nurses, National Safety and Quality Health Service Standards, Aged Care Quality Standards, National Health Priority Areas and where applicable the NMBA National Competency Standards for the Midwives, NMBA Code of Conduct for Midwives, ICM/NMBA Code of Ethics for Midwives have informed the content development of this unit. Pathophysiology of the National Health Priority Areas for diseases of the endocrine; hepatic/immune; renal; reproductive systems; and the special senses throughout the lifespan Medication nomenclature and classification of common classes of medications used to treat specific endocrine; hepatic/immune; renal; reproductive systems; and the special senses throughout the lifespan Pharmacokinetics and Pharmacodynamics of common classes of medications used to treat specific endocrine; hepatic/immune; renal; reproductive systems; and the special senses throughout the lifespan Drug actions and changes in drug actions in disease



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process of the endocrine; hepatic/immune; renal; reproductive systems; and the special senses Common adverse actions of pharmacological treatments of endocrine; hepatic/immune; renal; reproductive systems; and the special senses Drug administration principles- safe drug calculation practices Interpretation of diagnostic tests in relation to endocrine; hepatic/immune; renal; reproductive systems; and the special senses. Delirium, pathophysiology and care for the disease state listed above; Delirium care across the lifespan. Contextualise and assess nursing graduate capabilities and Practice Standards allocated to this course

## **FEDTASKS**

Federation University Federation recognises that students require key transferable employability skills to prepare them for their future workplace and society. FEDTASKS (**T**ransferable **A**ttributes **S**kills and **K**nowledge) provide a targeted focus on five key transferable Attributes, Skills, and Knowledge that are be embedded within curriculum, developed gradually towards successful measures and interlinked with cross-discipline and Cooperative Learning opportunities. *One or more FEDTASK, transferable Attributes, Skills or Knowledge must be evident in the specified learning outcomes and assessment for each FedUni Unit, and all must be directly assessed in each Course.* 

| FEDTASK attribute and descriptor                 |  | Development and acquisition of FEDTASKS in the Unit |                          |  |
|--|--|---|--------------------------|--|
|  |  | Learning<br>Outcomes<br>(KSA)                       | Assessment task<br>(AT#) |  |
| FEDTASK 1<br>Interpersonal                       | Students will demonstrate the ability to effectively communicate, inter-act and work with others both individually and in groups. Students will be required to display skills inperson and/or online in:  Using effective verbal and non-verbal communication Listening for meaning and influencing via active listening Showing empathy for others Negotiating and demonstrating conflict resolution skills Working respectfully in cross-cultural and diverse teams. | Not applicable                                      | Not applicable           |  |
| FEDTASK 2<br>Leadership                          | Students will demonstrate the ability to apply professional skills and behaviours in leading others. Students will be required to display skills in:  Creating a collegial environment  Showing self -awareness and the ability to self-reflect  Inspiring and convincing others  Making informed decisions  Displaying initiative   | Not applicable                                      | Not applicable           |  |
| FEDTASK 3<br>Critical Thinking<br>and Creativity | Students will demonstrate an ability to work in complexity and ambiguity using the imagination to create new ideas. Students will be required to display skills in:  Reflecting critically Evaluating ideas, concepts and information Considering alternative perspectives to refine ideas Challenging conventional thinking to clarify concepts Forming creative solutions in problem solving.  | Not applicable                                      | Not applicable           |  |



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| FEDTASK attribute and descriptor                |  | Development and acquisition of FEDTASKS in the Unit |                       |  |
|---|--|---|-----------------------|--|
|   |  | Learning<br>Outcomes<br>(KSA)                       | Assessment task (AT#) |  |
| FEDTASK 4<br>Digital Literacy                   | Students will demonstrate the ability to work fluently across a range of tools, platforms and applications to achieve a range of tasks. Students will be required to display skills in:  • Finding, evaluating, managing, curating, organising and sharing digital information  • Collating, managing, accessing and using digital data securely  • Receiving and responding to messages in a range of digital media  • Contributing actively to digital teams and working groups  • Participating in and benefiting from digital learning opportunities.  | Not applicable                                      | Not applicable        |  |
| FEDTASK 5<br>Sustainable and<br>Ethical Mindset | Students will demonstrate the ability to consider and assess the consequences and impact of ideas and actions in enacting ethical and sustainable decisions. Students will be required to display skills in:  • Making informed judgments that consider the impact of devising solutions in global economic environmental and societal contexts  • Committing to social responsibility as a professional and a citizen  • Evaluating ethical, socially responsible and/or sustainable challenges and generating and articulating responses  • Embracing lifelong, life-wide and life-deep learning to be open to diverse others  • Implementing required actions to foster sustainability in their professional and personal life. | Not applicable                                      | Not applicable        |  |

# **Learning Task and Assessment:**

| Learning Outcomes Assessed                | Assessment Tasks                                     | Assessment Type                               | Weighting  |
|---|--|---|------------|
| K1, K2, K3, K4, S1, S2, S3, A1, A2, A3    | Attendance at Active Learning Sessions               | 80% Attendance at Active<br>Learning Sessions | S/U Hurdle |
| K4, A3                                    | Medication Competency Assessment                     | Medsafe                                       | S/U Hurdle |
| K1, K2, K3, K4, S1, S2, S3, A1, A2,<br>A3 | Application of pathophysiology for nursing practice. | Case Study                                    | 40-60%     |
| K1, K2, K3, K4, S1, S2, S3, A1, A2,<br>A3 | Two phase on-campus assessment                       | Practical Test                                | 40-60%     |

# **Adopted Reference Style:**

APA ()

Refer to the <u>library website</u> for more information

Fed Cite - referencing tool