

School / Faculty: Faculty of Health

Course Title: NURSING PRACTICE 3: PATHOPHYSIOLOGY & PHARMACOLOGY APPLIED TO NURSING

Course ID: NURBN2012

Credit Points: 15.00

Prerequisite(s): Nil

**Co-requisite(s):** (NURBN2011) Contexts of Practice 1: Surgical and Medical Nursing

Exclusion(s): Nil

**ASCED Code:** 060301

**Grading Scheme:** Graded (HD, D, C, etc.)

### **Program Level:**

AQF Level of Program								
	5	6	7	8	9	10		
Level								
Introductory								
Intermediate			~					
Advanced								

#### **Learning Outcomes:**

On successful completion of this course the students are expected to be able to:

# **Knowledge:**

- **K1.** Critically examine and explain the pathologic effects of selected disease processes at the cellular and systemic levels;
- **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.** Apply the critical thinking process to the use of pathophysiological principles as a basis for nursing practice;
- **S2.** Critically evaluate for the presence and effects of compensatory mechanisms in response to major physiological alterations;

## Application of knowledge and skills:

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- **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; and
- **A3.** Apply pharmacological concepts of treatment of commonly occurring conditions across the life span.

### **Course Content:**

The NMBA Registered Nurses Standards for Practice (2016); NMBA Code of Professional Conduct for Nurses (2013) and NMBA Code of Ethics for Nurses (2013) have been considered in the development of the content of this course. Utilising Inquiry Based Learning (IBL) this course will incorporate a Lifespan Approach to course materials and specific case based examples to address Australian Commission on Safety and Quality in Health Care, Clinical Care Standards (2015).

## Topics may include:

- Pathophysiology of the National Health Priority Areas for diseases of the cardiovascular, respiratory, nervous, digestive and musculoskeletal systems
- Medication nomenclature and classification of common classes of medications used to treat specific cardiovascular, respiratory, nervous, digestive and musculoskeletal systems throughout the lifespan
- Pharmacokinetics and pharmacodynamics of common classes of medications used to treat specific cardiovascular, respiratory, nervous, digestive and musculoskeletal systems throughout the lifespan
- Drug actions and changes in drug actions in disease processes of the cardiovascular, respiratory, nervous, digestive and musculoskeletal systems
- Common adverse actions of pharmacological treatments of cardiovascular, respiratory, nervous, digestive and musculoskeletal systems
- Drug administration principles safe drug calculation practices
- Interpretation of diagnostic tests in relation to cardiovascular, respiratory, nervous, digestive and musculoskeletal systems.

# **Values and Graduate Attributes:**

#### Values:

- **V1.** Understand the connection between evidence, nursing practice and outcomes of nursing care for National Health Priority areas of cardiovascular; respiratory; nervous; digestive and musculoskeletal systems.
- **V2.** Appreciate the importance of the role of the nurse in maintaining safe medication practice when delivering patient care.

#### **Graduate Attributes:**

FedUni graduate attributes statement. To have graduates with knowledge, skills and competence that enable them to stand out as critical, creative and enquiring learners who are capable, flexible and work ready, and responsible, ethical and engaged citizens.

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FedUni graduate attributes statement. To have graduates with knowledge, skills and competence that enable them to stand out as critical and enquiring learners who are capable, flexible and work ready, and responsible, ethical and engaged citizens. These have been applied to nursing context below:

Nursing Graduate Attributes:

The Bachelor of Nursing is a graduate capabilities outcomes-based curriculum. This course develops and/or assesses the following Federation University Australia and Registered Nursing Graduate Capabilities and the NMBA Registered Nurse Standards for Practice (2016).

Federation University Graduate Attributes	Registered Nurse Graduate Capabilities	Introductory (Introduced)	Intermediate (Repeated)	Advanced (Taught)	Assessed
Responsible, ethical, engaged Social/cultural perspectives Local/national/international communities	<ol> <li>Professional and ethical decision maker</li> </ol>		<b>✓</b>		•
	<ol><li>Politically astute, situational leader and citizen</li></ol>	1			
	Socially and culturally aware agent for change		<b>*</b>		<b>✓</b>
Critical, creative and enquiring Problem solver Ongoing learning	<ol><li>Critical, reflective thinker adept in clinical reasoning</li></ol>		<b>*</b>		•
	5. Creative problem solver		✓		✓
	6. Life-long researcher	1			
Capable, flexible and work ready Communication skills Independent & collaborative worker	<ol><li>Skilled therapeutic Communicator</li></ol>		<b>*</b>		•
	8. Capable Inter- Disciplinary Healthcare Team Member				
	9. Competent, caring, safe and professional practitioner			<b>,</b>	<b>,</b>

# **Learning Task and Assessment:**

#### Planned Student Learning Experience

A 15 credit point course will involve a minimum of 150 hours of learning. For every one hour of teacher directed learning there will be a minimum of two hours of student/learner directed learning. The Teacher-directed hours of student learning in this course will be experienced primarily through teaching innovations like interactive technology enhanced learning, class discussions, audio-visual presentations, flexible blended and on-line learning, low and high fidelity simulations, exploration of case studies and inquiry-based learning. Active participation in encouraged during class sessions. Attendance at all clinical placement and laboratory sessions is compulsary.

Learner- directed hours will include focused learning activities, simulated laboratory learning, practice and reflection on practice, and role modelling. Students are expected to access electronic research databases and use computers to facilitate learning.

Learning Outcomes Assessed	Assessment Task Assessment Type		Weighting
K1, K2, K3, K4 S1, S2, A1, A2, A3	Assessment of principles of pathophysiology for nursing practice	Written Test	40 - 60%
K1, K2, K3, K4 S1, S2, A1, A2, A3	Application of pathophysiology for nursing practice	Case Scenario	40 - 60%
K1, K2, K3, K4 S1, S2, A1, A2, A3	Medication Competency Assessment	Medication Calculation Test	HURDLE

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**Adopted Reference Style:** 

APA