



Course Outline (Higher Education)

School: School of Health

Course Title: NURSING CONTEXT 4: APPLIED PHARMACOLOGY

Course ID: SHMCN6004

Credit Points: 15.00

Prerequisite(s): (SHMCN6001)

Co-requisite(s): (SHMCN6005)

Exclusion(s): Nil

ASCED: 060301

Description of the Course:

This course provides students with an in-depth study of the field of therapeutics, which plays a significant role in the prevention and management of disease. Nurses must develop a comprehensive knowledge of the actions and effects of medicines being consumed by patients in their care in order to provide safe, competent and effective medication administration and management. This course examines fundamental knowledge and skills to promote the therapeutic application of medications in the clinical setting, including in relation to the pathophysiology of the cardiovascular, respiratory, nervous, digestive, hepatic, immune, renal, reproductive and musculoskeletal systems across the lifespan. Students will be expected to identify and relate safe, effective and evidence-based pharmacological interventions and strategies for the management and treatment of commonly identified conditions, enhancing the ability of the nurse to provide safe, high quality, person-centred education and care across the lifespan.

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

Placement Component: No

Supplementary Assessment: Yes

Where supplementary assessment is available a student must have failed overall in the course but gained a final mark of 45 per cent or above and submitted all major assessment tasks.

Program Level:

Lovel of course in Dreamen	AQF Level of Program					
Level of course in Program	5	6	7	8	9	10
Introductory						



Lovel of source in Dressen	AQF Level of Program					
Level of course in Program	5	6	7	8	9	10
Intermediate					~	
Advanced						

Learning Outcomes:

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

Knowledge:

- **K1.** Examine various terminologies, characteristics and mechanisms of action of significant medication groups
- **K2.** Discuss the therapeutic effects of and responses to medications, including in relation to the pathologic effects of selected diseases and life span considerations
- **K3.** Define the indicators of unwanted effects (adverse reactions), toxicity, interactions and overdoses, across significant medication groups and related life span considerations
- **K4.** Identify the roles of the professional nurse in relation to medication administration, monitoring and education, and relevant clinical care standards

Skills:

- **S1.** Analyse appropriate administration considerations for significant medication groups, including pathologic and lifespan factors that determine the potency of medication responses
- **S2.** Explore the use of complementary and alternative therapies in the health care setting and describe the implications for nursing practice
- **S3.** Apply clinical reasoning to understand and demonstrate the connection between pathophysiological and pharmacological principles as a basis for nursing practice
- **S4.** Utilise nursing assessment principles and clinical reasoning to medication administration and management to promote safe, high quality patient care

Application of knowledge and skills:

- **A1.** Explore the impact of polypharmacy and develop patient-specific nursing plans for patient care
- **A2.** Investigate factors and processes that may contribute to medication errors in professional practice
- **A3.** Assess the effect of digital technologies and informatics on prescribing, dispensing and administering medications
- **A4.** Apply pharmacological concepts of treatment for commonly occurring conditions across the life span in developing a clinical pharmacology care plan
- **A5.** Implement the knowledge and skills of therapeutic pharmacological intervention in clinically-based scenarios

Course Content:

The NMBA Registered Nurse Standards for Practice (2016), Code of Professional Conduct for Nurses (2018) and Code of Ethics for Nurses (2018), National Safety and Quality Health Service Standards (2017-2019), National Safety and Quality Primary and Community Healthcare Standards (2021), Aged Care Quality Standards (2021), National Standards in Mental Health Services (2017), Prescribing Competencies Framework (2021), National Digital Health Framework (2021), National Health Priority areas and the Registered Nurse Cultural Standards (2018) have informed the syllabus/content of this course.

• Intermediate to advanced pharmacodynamics, pharmacokinetics for nursing practice applications



- Medication groupings and common classes of medications used to treat specific systems and conditions, across the lifespan
- Complementary, alternative and over the counter medications and therapies
- Pathophysiological issues and unwanted drug effects
- Lifespan issues and unwanted drug effects
- Medication safety in mental health conditions
- Cultural health issues relating to pharmaceuticals
- Application of ethics and critical thinking to pharmacology scenarios
- Pharmacological assessment & clinical decision making
- Assessment protocols/template applications
- Patient medication education (e.g. teach back method)
- Medication charting and errors, including incident reporting and open disclosure
- Off-label prescribing
- Drug administration principles safe drug calculation practices

Values:

- **V1.** Appreciate the depth of knowledge required by Registered Nurses to safely administer and manage a range of medications
- **V2.** Appreciate the importance of the role of the nurse and the impact of digital technologies and informatics in maintaining safe medication practice when delivering patient care
- **V3.** Understand the impact of health status and lifespan of individuals in terms of responses to therapeutics and medications
- **V4.** Appreciate the importance of increasing patient awareness of and access to digital information regarding medications
- **V5.** Respect the connection between evidence, nursing practice and outcomes of nursing care for National Health Priority areas

Graduate Attributes

The Federation University FedUni graduate attributes (GA) are entrenched in the <u>Higher Education Graduate</u> <u>Attributes Policy</u> (LT1228). FedUni graduates develop these graduate attributes through their engagement in explicit learning and teaching and assessment tasks that are embedded in all FedUni programs. Graduate attribute attainment typically follows an incremental development process mapped through program progression. One or more graduate attributes must be evident in the specified learning outcomes and assessment for each FedUni course, and all attributes must be directly assessed in each program

Students will be equipped with advanced level knowledge of the determinants of health, health determinants and the skills, motivation and confidence to engage in continuous learning to meet the personal, professional and vocational challenges of an ever changing world;

Graduate attribute and descriptor	Development and acquisition of GAs in the course	
	Learning outcomes (KSA)	Assessment task (AT#)



GA 1 Thinkers	Our graduates are curious, reflective and critical. Able to analyse the world in a way that generates valued insights, they are change makers seeking	K1, K2, K3, K4, S1, S2, S3, S4, A1, A2, A3, A4, A5	AT1, AT2, AT3, AT4
GA 2 Innovators	and creating new solutions. Our graduates have ideas and are able to realise their dreams. They think and act creatively to achieve and inspire positive change.	K1, K2, K3, K4, S1, S2, S3, S4, A1, A2, A3, A4, A5	AT2, AT4
GA 3 Citizens	Our graduates engage in socially and culturally appropriate ways to advance individual, community and global well-being. They are socially and environmentally aware, acting ethically, equitably and compassionately.	K1, K2, K3, K4, S1, S2, S3, S4, A1, A2, A3, A4, A5	AT2, AT4
GA 4 Communicators	Our graduates create, exchange, impart and convey information, ideas, and concepts effectively. They are respectful, inclusive and empathetic towards their audience, and express thoughts, feelings and information in ways that help others to understand.	K1, K2, K3, K4, S1, S2, S3, S4, A1, A2, A3, A4, A5	AT2, AT4
GA 5 Leaders	Our graduates display and promote positive behaviours, and aspire to make a difference. They act with integrity, are receptive to alternatives and foster sustainable and resilient practices.	K1, K2, K3, K4, S1, S2, S3, S4, A1, A2, A3, A4, A5	AT2, AT4

Learning Task and Assessment:

Learning Outcomes Assessed	Learning Tasks	Assessment Type	Weighting
K1, K2, K3, S1, S2, S3, A2, A3, A5	Application of knowledge and skills	On-line quizzes	15-25%
K1, K2, K3, S1, S4, A4	Development and presentation of a clinical drug education resource	Visual / oral presentation	20-40%
K3, K4, S1, S4	Medication calculation assessment	Online test	S/U
K1, K2, K3, K4, S1, S2, S3, S4, A1, A2, A3, A4, A5	Application of knowledge and skills	Test / examination	40-60%

Adopted Reference Style:

APA

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

Fed Cite - referencing tool