

# 1. General Course Information

# 1.1 Course Details

| Course Code:        | 1807NRS                            |
|---------------------|------------------------------------|
| Course Name:        | Safe Administration of Medications |
| Trimester:          | Health Care Trimester 3, 2019      |
| Program:            | Diploma of Health Care             |
| Credit Points:      | 10                                 |
| Course Coordinator: | Nicholas Brunette                  |
| Document modified:  | 9 <sup>th</sup> September 2019     |

# **Course Description**

1807NRS Safe Administration of Medication is a 10 Credit Point course situated within the second trimester and third trimester of the Diploma of Health Care. The Diploma of Health Care is designed to provide students with a pathway to:

\* further university studies in health care disciplines, or

\* direct employment.

Rationale

Medication administration is an important nursing activity, completed in collaboration with the client, the medical practitioner and the pharmacist. Medication administration appears to be a simple task but it is a complex, multi-faceted activity. Safe medication practices help to ensure positive client outcomes.

# Assumed Knowledge

### Prerequisites

There are no prerequisites for this course.

Assumed Knowledge:

- 1. It is assumed that students enrolled in this course will have an understanding of basic mathematical concepts such as addition, subtraction, division, multiplication, fractions and decimals.
- 2. Students will have anatomy and physiology knowledge on which to build their understanding of how medications work in the human body.
- 3. Students will have a developing knowledge of healthcare language.

# 1.2 Teaching Team

Your lecturer/tutor can be contacted via the email system on the portal.

| Name  | Email  |
|---|--|
| Nicholas Brunette (Course Coordinator, Lecturer and | nicholas.brunette@staff.griffithcollege.edu.au |
| Tutor)<br>Cristine Purvis (Tutor)                   | Cristine.Purvis@staff.griffithcollege.edu.au   |
|   | Chotmen urvis@stan.ghimthconege.edd.ad         |

# 1.3 Staff Consultation

Your lecturer/tutor is available each week for consultation outside of normal class times. Times that your lecturer/tutor will be available for consultation will be given in the first week of lectures. A list of times and rooms will be published on the Griffith College Portal under the "Support and Services/Teacher Consultation Times" link.

# 1.4 Timetable

Your timetable is available on the Griffith College Portal at Class Timetable in Student and Services.

## **1.5 Technical Specifications**

All students must have access to a computer or suitable mobile device.

## 2. Aims, Outcomes & Generic Skills

### 2.1 Course Aims

This course aims to organize care for safety and quality related to the clinical application of pharmacology and the administration of medications. Information on the principles of drug action in the body provides an understanding of the rational use of drugs in prevention and treatment of disease. Emphasis will be placed on the mechanism(s) of action, physiological effects, clinical uses, pharmacokinetics and adverse effects of the most important drug(s) in each pharmacological class covered. Roles and responsibilities related to safe medication administration practices are emphasized.

# 2.2 Learning Outcomes

After successfully completing this course you should be able to:

- 1. Explain the principles of pharmacokinetics and pharmacodynamics;
- 2. Discuss the indications, contraindications and adverse effects of medications in relation to pathophysiology and individual client needs;
- 3. Describe contributing factors to medication errors (and near-miss incidents), associated with prescribing, dispensing, administering and monitoring medications;

4. Demonstrate proficiency in medication calculations for safe administration of medications in accordance with scope of practice.

# 2.3 Generic skills

For further details on the Generic Skills please refer to the Graduate Generic Skills and Capabilities policy.

Griffith College aims to develop graduates who have an open and critical approach to learning and a capacity for lifelong learning. Through engagement in their studies, students are provided with opportunities to begin the development of these and other generic skills.

Studies in this course will give you opportunities to begin to develop the following skills:

| Generic Skills                   | Taught | Practiced | Assessed |
|----------------------------------|--------|-----------|----------|
| Written Communication            | Yes    | Yes       | Yes      |
| Oral Communication               |        | Yes       | Yes      |
| Information Literacy             | Yes    | Yes       | Yes      |
| Secondary Research               | Yes    | Yes       | Yes      |
| Critical and Innovative Thinking | Yes    | Yes       | Yes      |
| Academic Integrity               | Yes    | Yes       | Yes      |
| Self Directed Learning           |        | Yes       | Yes      |
| Team Work                        |        | Yes       | Yes      |
| Cultural Intelligence            | Yes    | Yes       | Yes      |
| English Language Proficiency     |        | Yes       | Yes      |

# 3. Learning Resources

## 3.1 Required Resources

### **Required Text:**

Tiziani, A. (2017). Havard's nursing guide to drugs (10th ed.). Chatswood, NSW: Mosby Elsevier.

Bullock, S., & Manias, E. (2017). Fundamentals of Pharmacology (8th ed.). Frenchs Forest, NSW: Pearson.

## 3.2 Recommended Resources

### **Recommended Text:**

Australian Medicines Handbook (2016) Australian Medicines Handbook Pty Ltd. Adelaide, SA: Australian Medicines Handbook.

Brotto, V. & Rafferty, K. (2012). *Clinical Dosage Calculations for Australia and New Zealand.* (1st ed.). Melbourne, Vic: Cengage Publishing.

#### **Recommended Readings:**

All recommended reading will be provided on the Griffith College Portal. There will be access to online resources, web links and interactive learning materials.

# 3.3 College Support Services and Learning Resources

The College provides many facilities and support services to assist students in their studies. Links to information about College support resources that are available to students are included below for easy reference.

<u>Digital Library</u> – Databases to which Griffith College students have access to through the Griffith Library Databases.

MyStudy - there is a dedicated website for this course via MyStudy on the Griffith College Portal.

<u>Academic Integrity Tutorial</u> - this tutorial helps students to understand what academic integrity is and why it matters. You will be able to identify types of breaches of academic integrity, understand what skills you will need in order to maintain academic integrity, and learn about the processes of referencing styles.

Services and Support provides a range of services to support students throughout their studies including personal support such as Counselling; Academic support; and Welfare support.

Jobs and Employment in the <u>Student Hub</u> can assist students with career direction, resume and interview preparation, job search tips, and more.

IT Support provides details of accessing support, information on s numbers and internet access and computer lab rules.

## 3.4 Other Learning Information

### Attendance

You are expected to attend all lectures and tutorials and to actively engage in learning during these sessions. You are expected to bring all necessary learning resources to class such as the required textbook and /or Workbook. In addition, you may BYOD (bring your own device) to class such as a laptop or tablet. This is not a requirement as computer lab facilities are available on campus, however, the use of such devices in the classroom is encouraged with appropriate and considerate use principles being a priority.

### **Preparation and Participation in Class**

In order to enhance learning, prepare before lectures and tutorials. Read the relevant section of your text book before a lecture, and for a tutorial read both the textbook and the relevant lecture notes. If you have been given tutorial exercises, make sure you complete them. Active participation in lectures and tutorials will improve your learning. Ask questions when something is unclear or when you want to bring some issue to your lecturer or tutor's attention; respond to questions to test your knowledge and engage in discussion to help yourself and others learn.

### **Consultation Sessions**

Teachers offer extra time each week to assist students outside the classroom. This is known as 'consultation time.' You may seek assistance from your teacher on email or in person according to how the teacher has explained this to the class. Attendance during consultation time is optional but you are encouraged to use this extra help to improve your learning outcomes.

#### **Course Materials**

Lecture notes will be made available to you in MyStudy on the Griffith College Portal and you are advised to either print these out and bring them to each class so that extra notes can be added or BYOD (bring your own device) and add extra notes digitally.

### Self-Directed Learning

You will be expected to learn independently. This means you must organise and learn the course content even when you are not specifically asked to do so by your lecturer or tutor. This involves revising the weekly course material. It also means you will need to find additional information for some assessment items beyond that given to you in textbooks and lecture notes, and to construct your own response to a question or topic. All of this requires careful planning of your time. Expect to spend, on average, at least 10 hours per week including class time for each of your courses.

### **Program Progression**

You are reminded that satisfactory Program Progression requires that attendance in classes is maintained at equal to or greater than 80%, and that GPA is maintained at equal to or greater than 3.5 [please see Griffith College Policy Library - Program Progression Policy - for more information].

### Teacher and course Evaluation

Your feedback is respected and valued by your lecturers and tutors. You are encouraged to provide your thoughts on the course and teaching, both positive and critical, directly to your lecturer and tutor or by completing course and lecturer evaluations via Griffith College's evaluation tool whenever these are available.

# 4. Learning and Teaching Activities

## 4.1 Weekly Learning Activities

| Week | Торіс  | Activity | Readings                                    |
|------|--|----------|---|
| 1    | Introduction to Course<br>A brief history of Pharmacology<br>Definitions and Key Concepts: Pharmacology,<br>Pharmacodynamics & Pharmacokinetics  | Lecture  | Refer to Griffith College<br>student portal |
|      | Introduction to Medication Calculations &<br>Mathematical Concepts<br>Medication Calculation Exercises on the Portal.<br>Revision of metric system and calculation for<br>tablets.<br>Practice calculations<br>Use of drug information sources – Havard's<br>nursing guide to drugs/ AMH/NPS/Other<br>Websites | Tutorial | Refer to Griffith College<br>student portal |
|      | Revision of lecture content and quiz<br>Revision of search strategies for Assessments.   | Workshop | Refer to Griffith College student portal    |
| 2    | Safety & Regulations<br>Schedules<br>Roles & Responsibilities  | Lecture  | Refer to Griffith College student portal    |
|      | Nomenclature: ACQHS<br>Drug names- suffixes<br>NIMC Review<br>Drug administration strategies and<br>documentation  | Tutorial | Refer to Griffith College<br>student portal |

|   | Medication Calculation Practice/Revision<br>(Tablets)<br>Using MIMs/AMH<br>*Adverse reactions and interactions – brief case<br>analysis using medication charts             |          |   |
|---|---|----------|---|
|   | Safety/Schedules revision of lecture content and<br>quiz<br>Medication Safety - DVD   | Workshop | Refer to Griffith College<br>student portal |
| 3 | Autonomic Pharmacology:<br>Adrenergic & Cholinergic   | Lecture  | Refer to Griffith College<br>student portal |
|   | Medication Errors: Analysis of Safety Issues -<br>Applying s systems approach to medication<br>error: Identification, Analysis and Intervention.<br>Reasons' Model Activity | Tutorial | Refer to Griffith College<br>student portal |
|   | Revision of lecture content and quiz<br>Medication Calculation Practice   | Workshop |   |
| 4 | Introduction to Chemical Mediators:<br>Prostaglandins, Histamine, Serotonin, Dopamine<br>etc.   | Lecture  |   |
|   | Review or lecture content/Quiz<br>Medication calculation practice   | Workshop |   |
|   | Concepts of Weights & Measures<br>Calculation Practice Exam   | Tutorial | Refer to Griffith College student portal    |
| 5 | Analgesics & Gastrointestinal Medications   | Lecture  | Refer to Griffith College<br>student portal |
|   | Medication Monograph<br>Patient education and Adult Learning Principles   | Tutorial | Refer to Griffith College student portal    |

|   | Problem-based learning activity   |          |  |
|---|---|----------|--|
|   | Online Medication Calculation Exam  |          |  |
|   | Adult Learning & Patient Education  | Workshop | Refer to Griffith College student portal |
| 6 | Cardiovascular & Renal Medications<br>Anticoagulants  | Lecture  | Refer to Griffith College student portal |
|   | Worksheet & Review of lecture content   | Workshop | Refer to Griffith College student portal |
|   | Medication Monograph<br>Case Study-Cardiovascular/Renal & Anti-<br>coagulant patient scenarios and problem-based<br>learning activity | Tutorial | Refer to Griffith College student portal |
| 7 | Respiratory Medications/ Hypnotic/sedative and treating mood disorders  | Lecture  | Refer to Griffith College student portal |
|   | Medication Monograph<br>Examining Respiratory Therapy<br>Case study and problem-based learning activity                               | Tutorial | Refer to Griffith College student portal |
|   | Worksheet & lecture revision and quiz   | Workshop | Refer to Griffith College student portal |
| 8 | Pharmaceutical Management of Endocrine<br>Disorders   | Lecture  | Refer to Griffith College student portal |
|   | Quiz & lecture revision<br>Medication games   | Workshop | Refer to Griffith College student portal |
|   | Medication Monograph<br>Case scenarios/Patient scenarios<br>Insulin Therapy & Management of<br>Hypo/Hyperglycemia                     | Tutorial | Refer to Griffith College student portal |
| 9 | Antibiotics & antifungals   | Lecture  | Refer to Griffith College student portal |

|    | Medication Monograph<br>Case Study and Review of Prescribing<br>Guidelines | Tutorial | Refer to Griffith College student portal    |
|----|--|----------|---|
|    | Quiz & Revision<br>NIMC audit practice                                     | Workshop | Refer to Griffith College<br>student portal |
| 10 | Revision lecture   | Lecture  | Refer to Griffith College student portal    |
|    | MCQ Exam Practice  | Tutorial |   |
|    | Case scenario & Exam Revision  | Workshop |   |
| 11 | 2-hour revision session  | Tutorial |   |

### **Content Schedule**

### Module 1 - The 'Student-Registered Nurse', Patient and their Family

Learning Outcomes: 1, 2, 3, 4

### Overview:

This module will discuss the indications, contraindications and adverse effects of medications in relation to pathophysiology (covered in lectures) and individual patient needs. We learn how medications are regulated in Australia and access resources on safe medication use (including indications, contraindications and adverse effects). The roles and responsibilities of nurses and other health care professionals in relation to medication administration, legal and ethical issues and medication regulations are explored, and we develop skills to engage with and educate patients and/or their families about their medications.

Through discussion and self-directed learning activities, you will also gain insight to the patient's perspective and the impact that medication errors have on patients and their families.

### This module contains 3 topics:

TOPIC 1.1: Regulation of medicines in Australia

TOPIC 1.2: Interdisciplinary aspects of medication administration

TOPIC 1.3: Patient assessment prior to medication administration

### Module 2 - Safe Administration of Medications

Learning Outcomes: 1, 2, 3, 4

### Overview

This module introduces you to the key principles of medication administration. Throughout this module, you will develop your knowledge and skill in performing accurate medication calculations. In this module you will also learn the common routes of medication administration and why we use them.

#### This module contains 5 topics:

TOPIC 2.1: Medication Calculations TOPIC 2. 2: Drug Administration TOPIC 2.3: Drug Schedules TOPIC 2.4: Common Routes of Medication Administration TOPIC 2.5: Ethical issues in Medication Administration

### Module 3 - Evidence-based Practice

Learning 1, 2, 3 Overview: In this module you will learn how evidence-based practice focuses on care that is underpinned by strong evidence, thus ensuring high quality, safe patient care. Participation in this module will assist you to link pharmacology knowledge to clinical practice situations.

Remember of course, that evidence-based practice principles underpin this entire course! Although we have presented the modules separately, they are interwoven with each other.

### This module contains 2 topics:

TOPIC 3.1: Pharmacology TOPIC 3.2: Medication Actions

## 5. Assessment Plan

### 5.1 Assessment Summary

| Item | Assessment Task   | Weighting | Learning Outcomes | Due Date                    |
|------|---|-----------|-------------------|-----------------------------|
| 1    | Medication Calculations<br>Examination                          | 10%       | 4                 | Week 5                      |
| 2    | Log of Learning<br>Question Bank                                | 40%       | 1, 2, & 3         | Week 7                      |
| 3    | End of Trimester Exam-<br>selected and<br>constructed responses | 50%       | 1, 2.             | Final Examination<br>Period |

## 5.2 Assessment Detail

### 1. Medication Calculation Examination.

**Rationale**: This medication calculation examination is to enable students to demonstrate their mastery of drug calculations. You are required to achieve 100%.

**Details:** This 60 minutes online medication calculation examination comprises multiple choice and short answer questions. Students may have multiple attempts until they achieve 100%. For the purposes of the overall course weighting students will be awarded the mark that they achieve on their first attempt.

Marking Criteria: The Quiz will be marked in accordance with pre-determined model answers that have been internally moderated.

### 2. Log of Learning Question Bank.

Rationale: This assessment enables students to demonstrate their understanding of:

- 1. how medications are regulated in Australia;
- 2. the principles of pharmacokinetics and pharmacodynamics;
- 3. the roles and responsibilities of healthcare professionals involved in the medication cycle;
- 4. the contributing factors to medication errors (and near-miss incidents), associated with prescribing, dispensing, administering monitoring medications and preventative strategies to reduce errors.

**Details:** There are nine (9) questions. This assessment item requires students to complete this Question Bank and submit an electronic file to Turnitin for text matching by the due dates. The questions in this workbook are short answers. Each answer must be correctly structured using the conventions of academic writing (sentences, paragraphs, grammar, spelling, referencing).

### Other elements:

- Always refer to the Griffith College DHC Assignment Writing Guidelines 2018.
- Ensure that scholarly literature is used (digitised readings, research articles, relevant Government reports and text books).
- State the word count (excluding your reference list) on the Assignment Coversheet.
- Submit your assignment online via Turnitin as per the instructions on 1807NRS course site. Marking Criteria:

For detailed marking criteria refer to 1807NRS course site at Griffith College portal

### 3. End of Trimester Examination

**Rationale:** This individual assessment item is designed to assess the knowledge and understanding of the core concepts covered throughout the entire trimester. The exam will assess students' learning stemming from core concepts covered in lectures, tutorials and workshops presented during the whole course.

**Details:** The exam will consist of multiple choice and short answer questions which include 2 Case studies and NIMC audit.

Marking criteria: This exam will be marked following a strict marking guide and will undergo a full moderation process.

Further details on assessment will be provided to students via the course site on Griffith College Student Portal and in classes during the trimester.

#### Requirements to pass the course:

In order to pass this course and in addition to meeting the tutorial and workshop attendance and participation requirements, students must:

### 1. Attempt and submit ALL assessment items,

2. Achieve 100% in the online medication calculation examination (multiple attempts permitted). However, grade achieved on first attempt will be recorded, AND

3. Achieve a minimum cumulative total of 50% from all graded assessments.

### 5.3 Late Submission

An assessment item submitted after the due date, without an approved extension from the Course Coordinator, will be penalised. The standard penalty is the reduction of the mark allocated to the assessment item by 5% of the maximum mark applicable for the assessment item, for each working day or part working day that the item is late. Assessment items submitted more than five working days after the due date are awarded zero marks.

Please refer to the Griffith College website - Policy Library > Assessment Policy for guidelines and penalties for late submission.

### 5.4 Other Assessment Information

#### **Retention of Originals**

You must be able to produce a copy of all work submitted if so requested. Copies should be retained until after the release of final results for the course.

### **Requests for extension**

To apply for an extension of time for an assignment, you must submit an <u>Application for Extension of Assignment</u> form to your teacher at least 24 hours before the date the assignment is due. Grounds for extensions are usually: serious illness, accident, disability, bereavement or other compassionate circumstances and must be able to be substantiated with relevant documentation [e.g. <u>Griffith College Student Medical Certificate</u>]. Please refer to the Griffith College website - Policy Library - for guidelines regarding extensions and deferred assessment.

#### **Return of Assessment Items**

1. Marks awarded for in-trimester assessment items, except those being moderated externally with Griffith University, will be available on the Student Portal within fourteen [14] days of the due date. This does not apply to the final assessment item in this course (marks for this item will be provided with the final course result).

- 2. Students will be advised of their final grade through the Student Portal. Students can review their exam papers after student grades have been published (see relevant Griffith College Fact Sheet for allocated times at Support> Factsheets). Review of exam papers will not be permitted after the final date to enrol.
- 3. Marks for **all** assessment items including the final exam (if applicable) will be recorded in the Moodle Course Site and made available to students through the Moodle Course Site.

The sum of your marks overall assessment items in this course does not necessarily imply your final grade for the course. Standard grade cut off scores can be varied for particular courses, so you need to wait for the official release of grades to be sure of your grade for this course.

### 6. Policies & Guidelines

Griffith College assessment-related policies can be found in the <u>Griffith College Policy Library</u> which include the following policies:

Assessment Policy, Special Consideration, Deferred Assessment, Alternate Exam Sitting, Medical Certificates, Academic Integrity, Finalisation of Results, Review of Marks, Moderation of Assessment, Turn-it-in Software Use. These policies can be accessed using the 'Document Search' feature within the <u>Policy Library</u>

Academic Integrity Griffith College is committed to maintaining high academic standards to protect the value of its qualifications. Academic integrity means acting with the values of honesty, trust, fairness, respect and responsibility in learning, teaching and research. It is important for students, teachers, researchers and all staff to act in an honest way, be responsible for their actions, and show fairness in every part of their work. Academic integrity is important for an individual's and the College's reputation.

All staff and students of the College are responsible for academic integrity. As a student, you are expected to conduct your studies honestly, ethically and in accordance with accepted standards of academic conduct. Any form of academic conduct that is contrary to these standards is considered a breach of academic integrity and is unacceptable.

Some students deliberately breach academic integrity standards with intent to deceive. This conscious, premeditated form of cheating is considered to be one of the most serious forms of fraudulent academic behaviour, for which the College has zero tolerance and for which penalties, including exclusion from the College, will be applied.

However, Griffith College also recognises many students breach academic integrity standards without intent to deceive. In these cases, students may be required to undertake additional educational activities to remediate their behaviour and may also be provided appropriate advice by academic staff.

As you undertake your studies at Griffith College, your lecturers, tutors and academic advisors will provide you with guidance to understand and maintain academic integrity; however, it is also your responsibility to seek out guidance if and when you are unsure about appropriate academic conduct.

In the case of an allegation of a breach of academic integrity being made against a student he or she may request the guidance and support of a Griffith College Student Learning Advisor or Student Counsellor.

Please ensure that you are familiar with the Griffith College Academic Integrity Policy; this policy provides an overview of some of the behaviours that are considered breaches of academic integrity, as well as the penalties and processes involved when a breach is identified.

For further information please refer to the Griffith College website - Policy Library > Academic Integrity Policy

#### Reasonable Adjustments for Assessment – The Disability Services policy

The Disability Services policy (accessed using the Document Search' feature with the <u>Policy Library</u>) outlines the principles and processes that guide the College in making reasonable adjustments to assessment for students with disabilities while maintaining academic robustness of its programs.

#### **Risk Assessment Statement**

There are no out of the ordinary risks associated with this course.

# Copyright © - Griffith College

Note: For all Diploma level programs, Griffith College acknowledges content derived from Griffith University.