

COURSE SYLLABUS

LAST REVIEW	Spring 2021
COURSE TITLE	Pharmacology in Nursing III
COURSE NUMBER	NURS 0108
DIVISION	Health Professions
DEPARTMENT	Nursing/Registered Nurse
CIP CODE	51.3801
CREDIT HOURS	1
CONTACT HOURS/WEEK	Class: 1
PREREQUISITES	NURS 0107
COURSE PLACEMENT	This course is part of a selective admission program. Students must be admitted to the Nursing/Registered Nurse program to enroll in this course.

COURSE DESCRIPTION

This course is a culmination of the role of the professional nurse in the safe administration of medications across the lifespan. Specialized methods of medication administration will be covered. This course covers the mechanism of action, side effects, and nursing management of clients taking common medications. Students will plan appropriate health teaching for clients across the lifespan.

PROGRAM ALIGNMENT

This course is part of a program aligned through the Kansas Board of Regents and Technical Education Authority. For more information, please visit:

https://kansasregents.org/workforce_development/program-alignment

PROGRAM LEARNING OUTCOMES

1. Integrate caring behaviors in practicing the art and science of nursing within a diverse population.
2. Implement professional standards and scope of practice within legal, ethical, and regulatory frameworks.
3. Collaborate with clients and members of the inter-professional health care team to optimize client outcomes.
4. Formulate safe and effective clinical judgements guided by the nursing process, clinical reasoning, and evidence-based practice.
5. Provide leadership in the management of care to meet client needs using available resources and current technology.
6. Generate teaching and learning processes to promote and maintain health and to reduce risks for a global population.

7. Demonstrate effective communication methods to manage client needs and to interact with other health care team members.

TEXTBOOKS

<http://kckccbbookstore.com/>

METHODS OF INSTRUCTION

A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.

COURSE OUTLINE

- I. Specialized Methods of Medication Administration
 - A. Dosage calculation
 - B. Dimensional Analysis
 - C. For each drug – Mechanism of Action, Side/Adverse Effects, Nursing Interventions, Contraindications, Applicable Antidote

- II. Common Medication Classifications
 - A. Medications for Gas Exchange and Spinal Cord Injuries (CF, ARDS, Pneumothorax)
 1. Antibiotics
 2. Carbapenems
 3. Neuromuscular blockers

 - B. Medications for Clotting (Pulmonary Embolism, Hemophilia, DIC, HELLP)
 1. Thrombolytics
 2. Factor VII, IX, Desmopressin

 - C. Medications for Perfusion (Stroke, Coronary. Artery. Disease, Dysrhythmia, Shock, Sickle Cell)
 1. Class I-IV Antidysrhythmic drugs
 2. Vasopressors

 - D. Medications for Tissue Integrity (Burns)
 1. Vitamins
 2. Vaccines

 - E. Medications for Cognition & Medications for Stress & Coping (Epilepsy, Psychosis, Traumatic Brain Injury)
 1. Hydantoins
 2. Iminostilbenes

3. Valproic Acid
4. Miscellaneous anti-epileptics (AE)
5. Mood Stabilizing anti-epileptic drugs (AEDs)
6. Antipsychotics 1st-3rd Generations
7. Mood Stabilizer – Lithium
8. Substance abuse
Antabuse

F. Medications for Digestion (Pancreatitis, Peptic Ulcer Disease, GERD, Upper GI bleed, Pyloric Stenosis, Pancreatitis)

1. TPN
2. Ocreotide

G. Medications for Elimination (Chronic Kidney Disease, Acute Kidney Injury, Urolithiasis, BPH)

1. Phosphorous
2. Colony Stimulating Factors
3. Tamsulosin

H. Medications for Metabolism (Cirrhosis)

1. Colonic acidifier - lactulose

I. Medications for Immunity (Psoriasis, Hypersensitivity, Cancer, Rheumatoid Arthritis, Lupus, Hepatitis A, B, C, HIV, Transplants)

1. Anti-metabolites
2. Cytotoxic
3. Anti-mitotic
4. Alkylating
5. Topoisomerase inhibitors
6. Hormonal therapy target
7. Anti-neoplastic
8. Immunosuppressants
9. Interferon
10. Alpha-nucleoside anaalogs
11. Antivirals
12. Immunoglobulin
13. Anti-retrovirals
14. Anti-rejection

COURSE LEARNING OUTCOMES

Upon successful completion of this course, the student will:

- A. The student will demonstrate specialized dosage calculation utilizing dimensional analysis. (EPSLO 1, 2, & 4)
- B. The student will discuss the use, mechanism of action and side effects associated with selected classifications of medications. (EPSLO 4)
- C. The student will prioritize nursing interventions required for clients treated with selected classifications of medications. (EPSLO 4 & 5)
- D. The student will plan health teaching that encompasses a variety of ethical, cultural, and end-of-life considerations. (EPSLO 6)

ASSESSMENT OF COURSE LEARNING OUTCOMES

Student progress is evaluated through both formative and summative assessment methods. Specific details may be found in the instructor's course information document.

COLLEGE POLICIES AND PROCEDURES

Student Handbook

<https://www.kckcc.edu/files/docs/student-resources/student-handbook-and-code-of-conduct.pdf>

College Catalog

<https://www.kckcc.edu/academics/catalog/index.html>

College Policies and Statements

<https://www.kckcc.edu/about/policies-statements/index.html>

Accessibility and Accommodations

<https://www.kckcc.edu/academics/resources/student-accessibility-support-services/index.html>.