

# Pharmacology II NURS 123 Course Syllabus\_rev 12 17 2022

### **Basic Course Information**

Semester:	SPRING 2023	Instructor Name:	Julie Kunath MS APRN AGPCNP-AG AACNS-AG CCRN-K CNE
Course Title &			
#:	Pharmacology II NURS 123	Email:	Julie.kunath@imperial.edu
		Webpage	
CRN #:	20559	(optional):	CANVAS
Classroom:	Bldg. 2100, room 2152	Office #:	2103
			Mondays 1315-1515, Tuesdays
Class Dates:	02/13 - 06/09/2023	Office Hours:	1430-1530, Thursdays 1300-1400,
Class Days:	Mondays	Office Phone #:	(760) 355 - 6422
		Emergency	
Class Times:	0900 - 1025	Contact:	Nursing Office (760) 355 - 6348
Units:	1.5	Class Format:	In-person

### **Course Description**

The course addresses the principles of medication therapy for acute and complex conditions including the effects, actions, algorithms and recommended use of drugs in the treatment of complex patient problems. Safe administration practices and reduction of medication errors will be covered. The student will learn to manage complex medication administration through various routes including intravenous routes. Nursing actions and rationale for nursing actions are explored. Clinical application is integrated into the clinical nursing courses.

## Course Prerequisite(s) and/or Corequisite(s)

Prerequisites: Nursing 109 Pharmacology I

Corequisites: Nursing 127 Medical Surgical Nursing I

### **Student Learning Outcomes**

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

1. Identify the mechanism of action, use, side effects, and nursing interventions of medications for the CNS, cardiovascular, pulmonary, immune, reproductive and endocrine systems and for anti-infective, oncological, and allergic response medications by passing the final with a 78% or better score.

### **Course Objectives**

Upon satisfactory completion of the course, students will be able to:

1. Describe the anatomy and physiology of the CNS, cardiovascular, pulmonary, immune, reproductive, and endocrine systems.



- 2. Discuss the rationale and benefits of the major classifications of medications by the system they affect and considering oral versus infusion therapy.
- 3. Discuss the mechanism of action, use, side effects, and nursing interventions of medications for the CNS, cardiovascular, pulmonary, immune, reproductive, and endocrine systems.
- 4. Explain legal implications related to medication administration by the major classifications of medications covered; i.e. CNS, cardiovascular, pulmonary, immune, reproductive and endocrine systems.
- 5. Describe the major classifications of medications as they relate to specific body systems for clients of all ages with acute and complex conditions.
- 6. Demonstrate understanding of cultural-psychosocial aspects of client care related to patient teaching compliance in administration of the major classifications of medication.

#### **Textbooks & Other Resources or Links**

#### **REQUIRED**

Burchum, J. R., & Rosenthal, L. D. (2021). Lehne's pharmacology for nursing care (11th). Elsevier.

- Newest Edition paperback ISBN: 9780323825221
- Newest Edition eBook ISBN: 9780323825245
- Newest Edition Binder Ready Version **ISBN-13**: 978-0323829717
- May use previous (10<sup>th</sup>) Edition you are responsible to note differences in chapter #s between editions

RN Pharmacology for Nursing. ATI nursing education. (Content Mastery Series: Review Module)

ATI: Pharmacology Made Easy (online within ATI package)

#### **Course Requirements and Instructional Methods**

#### A. Hours

NURS 123 is a 1.5 unit theory course. Synchronous sessions will be held once a week. A minimum requirement of 4.5 hours of class preparation will be expected each week.

### **B.** Assignments:

Reading, videos, internet resources, and writing assignments are required. Students will be expected to read, understand, and critique information from college level textbooks, nursing journals, or equivalent. Additional reading assignments will be required to supplement textbook material. Writing assignments will reflect the objectives listed and may include, but not be limited to, short essays, posters, and/or professional papers. Outside assignments including but not limited to nursing lectures, independent exercises, and online learning activities may be assigned and are required.

Plagiarism and cheating policies noted in the student handbook and IVC policies will be strictly enforced. Students are expected to develop original work for this course.

Schedule may change at the discretion of the instructor, taking into account the progress of students with the materials. Any change will be announced in class or via email through Canvas. **Students are held responsible** 



for all materials covered in the syllabus and for any changes that are announced in class, sent by email or announced through Canvas.

It is recommended that if a grade falls below 82% that the student arrange to meet with the faculty member. Faculty can be reached in person, by email, by Zoom appt or during office hours to discuss grades or other classroom matters.

The student is responsible for withdrawing (W) from the class before the deadline as outlined on your registration forms. **Failure to pass this class will affect your ability to progress to the next semester.** Students failing or withdrawing must complete a Petition to Re-Enter.

## **Course Grading Based on Course Objectives**

Students must maintain a "C" average grade as determined by the scale below:

A = 93-100%

B = 85-92%

C = 78-84%

F = Below 78%

Grades will not be "rounded". To advance to the next semester, a "C" or better is required in this course and the co-requisite courses. The course grade will be computed as follows: 10% from homework/assignments, 10% from quizzes (in class, take-home, or online), 45% will come from an average of the three exams prior to the final exam, and 35% of the course grade will come from the final exam.

Homework/assignments/ATI	10%	
Quizzes	10%	
Exam 1	15%	
Exam 2	15%	
Exam 3	15%	
Final Exam	<u>35%</u>	
Total	100%	

#### All of the following must be attained to successfully pass this course:

- a. **Theory (exams) grade** must have a **total equivalent of 78% or greater**. This requirement must be met in order to progress to the Final Exam.
- b. Final Theory Exam score must be passed at a 78% or greater.
- c. Total grade calculation must be passed at a 78% or greater.
- d. Attendance requirements as noted below must be met.

Testing will include 3 examinations in addition to written, demonstration, and oral assignments, quizzes and a final examination. Pop quizzes may be included. EXCEPT FOR UNDER EXTREME CIRCUMSTANCES, THERE WILL BE NO MAKE-UPS FOR TESTS OR QUIZZES MISSED DUE TO ABSENCE.



#### **IVC Student Resources**

IVC wants you to be successful in all aspects of your education. For help, resources, services, and an explanation of policies, visit <a href="http://www.imperial.edu/studentresources">http://www.imperial.edu/studentresources</a> or click the heart icon in Canvas.

# **Anticipated Class Schedule/Calendar**

\*\*\*Tentative, subject to change without prior notice\*\*\*

Reading and assignments due before class are to be completed so that you may be an active participant in synchronous class discussions and class activities.

SPRING 2023 MONDAYS @ 0900 – 1025 WEEK/DATE TOPICS	Assigned Reading: Lehne's Pharm Text 11e	ATI
Week 1 February 13  -Seizures Overview and Management -CNS stimulants and depressants -Antidepressants Overview -Bipolar Disorder & mood- stabilizing drugs Overview -Anxiety Disorders Overview and Management	Chapters 27, 34, 35, 36, 38 & 39 Ch 27: Drugs for Seizure Disorders Ch 34: Antipsychotic Agents and Use in Schizophrenia Ch 35: Antidepressants Ch 36: Drugs for Bipolar Disorder Ch 38: Management of Anxiety Disorders Ch 39: Central Nervous System Stimulants and Attention-Deficit/Hyperactivity Disorder  Review KeyPoints for each chapter. Practice Evolve questions and review rationales. Review Nursing Implications for each chapter.	<ul> <li>☐ Introduction – The Nervous System,         The Brain, Neurons and         Neurotransmitters, Autonomic         Nervous System, Goal of Drug         Therapy</li> <li>☐ Drug Therapy for Seizure Disorders</li> <li>☐ Drug Therapy for ADHD and         Narcolepsy</li> </ul>
Week 2 February 20 (No Class)  Upper & Lower Respiratory Drugs  Tuberculosis Management	Chapters 73, 79, 80, & 94 Ch 73: Antihistamines Ch 79: Drugs for Asthma & Chronic Obstructive Pulmonary Disease Ch 80: Drugs for Allergic Rhinitis, Cough, and Colds Ch 94: Antimycobacterial Agents  Review KeyPoints for each chapter.  Practice Evolve questions and review rationales.	
Week 3 February 27  Drugs for Spasticity Drugs for Localized Muscle Spasm	<ul> <li>Review Nursing Implications for each chapter.</li> <li>Chapters 28 &amp; 37</li> <li>Ch 28: Drugs for Muscle Spasm and Spasticity</li> <li>Ch 37: Sedative-Hypnotic Drugs</li> <li>Review KeyPoints for each chapter.</li> </ul>	Review Pulmonary dz patho.  ATI Pharm Made Easy: MODULE: NEUROLOGICAL SYSTEM (PART 1)  Drug Therapy for Muscle Spasms



Other Centrally Acting Muscle  Relaxants  Practice Evolve questions and review rationales.  Review Nursing Implications for each chapter.	
Management of Insomnia	
& Use of Sedative-Hypnotic	
Drugs	
Week 4 EXAM 1: All content from weeks 1, 2, & 3	
March 6	
ATI Discuss Made Form	
Week 5 Chapters 74, 75, 76, & 77 Chapter 74: Cyclogy/genase Inhibitors: Nonsteroidal MODULE: PAIN AND INFLAMN	ΙΔΤΙΟΝ
March 13  Chapter 74: Cyclooxygenase Inhibitors: Nonsteroidal Anti-Inflammatory Drugs and Acetaminophen  Chapter 74: Cyclooxygenase Inhibitors: Nonsteroidal Introduction  Introduction	
Clearter 75. Clease entire in New and entire	
Cyclooxygenase Inhibitors:	ation
NSAIDs and Acetaminophen  Chapter 76: Drug Therapy for Rheumatoid Arthritis  Complete modules and te	st w/ at
Clauster 77 Days The second for Court	
Artificial Good	
MODULE: MUSCULOSKELETAL  ■ Review KeyPoints for each chapter.  □ Drug Therapy for Rheuma	
<ul> <li>Practice Evolve questions and review rationales.</li> <li>Drug Therapy for Rheuma</li> <li>Arthritis</li> </ul>	τοια
	and pain.
Review Nursing Implications for each chapter.  Review Patho for Inflammation  Review Patho for Inflammation	
Week 6 Chapters 24 & 25 ATI Pharm Made Easy:	
March 20 Chapter 24: Drugs for Parkinson Disease MODULE: NEUROLOGICAL SYS	STEM
Chapter 25: Drugs for Alzheimer's Disease (PART 1)	
☐ Drug Therapy for Parkinso	on's
Parkinson Disease and  Management  Review KeyPoints for each chapter.  Disease	
Management  Review ReyPoints for each chapter.  Practice Evolve questions and review rationales.	er's Disease
· · · · · · · · · · · · · · · · · · ·	ology
Alzheimer's Disease and  Review Nursing Implications for each chapter.  Review PD and AD Pathophysic	Diogy.
Week 7  Chapters 81, 82, & 83  Chapter 81: Drugs for Pentic Iller Disease  MODULE: GASTROINTESTINAL	SVSTEM
March 27 Chapter 81: Drugs for Peptic Ulcer Disease Chapter 82: Laxatives MODULE: GASTROINTESTINAL	JIJILIVI
Chapter 82: Other Castrointestinal Drugs	lcers
□ Drug Therapy for Nausea	
PUD meds, Anti-diarrheal &	ation
laxatives, anti-emetics  Review ReyPoints for each chapter.  Practice Evolve questions and review rationales.  Drug Therapy for Diarrhea	
Drug Therapy for Inflame	
Review Nursing Implications for each chapter.  Bowel Disease	,
☐ Complete modules and te	st with at
least 90%	
Review GI Diseases Patho	
Week 8 Exam 2	
April 3	
The state of the s	
NO CLASSES 4/10-4/15/2023 APRIL 10	



Week 9 April 17 Cardiovascular Drugs Heart Failure	Chapters 44, 46, 47, 48, 49, 50, & 51 Chapter 44: Diuretics Chapter 46: Review of Hemodynamics Chapter 47: Drugs Acting on the Renin-Angiotensin-Aldosterone System Chapter 48 Calcium Channel Blockers Chapter 49: Vasodilators Chapter 50: Drugs for Hypertension Chapter 51: Drugs for Heart Failure  Review KeyPoints for each chapter. Practice Evolve questions and review rationales. Review Nursing Implications for each chapter.	ATI Pharm Made Easy:  MODULE: CARIOVASCULAR SYSTEM  Drug therapy for Hypertension Drug therapy for Heart Failure  Review Cardiovascular Diseases Patho Review Cardiovascular and Renal Physiology
Week 10 April 24 Angina/MI/Coagulation Dysrhythmias/Shock	Chapters 52, 53, 54, 55, & 56 Chapter 52: Antidysrhythmic Drugs Chapter 53: Drugs That Help Normalize Cholesterol and Triglyceride Levels Chapter 54: Drugs for Angina Pectoris Chapter 55: Anticoagulant, Antiplatelet, and Thrombolytic Drugs Chapter 56: Management of ST-Elevation Myocardial Infarction  Review KeyPoints for each chapter.  Practice Evolve questions and review rationales.  Review Nursing Implications for each chapter.	ATI Pharm Made Easy:  MODULE: CARIOVASCULAR SYSTEM  Drug therapy for Coronary Heart Disease Drug therapy for cardiac dysrhythmias  MODULE: HEMATOLOGIC SYSTEM Thromboembolic Drugs: Drug Therapy to Prevent and Dissolve  Review Cardiovascular Diseases Patho  ATI Practice Exam A
Week 11 May 1 Hematopoietic Disorders and Management  Week 12 May 8	Chapters 58 & 59 Chapter 58: Drugs for Deficiency Anemias Chapter 59: Hematopoietic Agents  Review KeyPoints for each chapter. Practice Evolve questions and review rationales. Review Nursing Implications for each chapter.  Exam 3	ATI Pharm Made Easy:  MODULE: HEMATOLOGIC SYSTEM  Drug Therapy for Anemia Drug therapy that supports hematopoiesis  Review Anemia Patho Review Hematopoietic Physiology and Pathophysiology
Week 13 May 15 Chemotherapy of Infectious Disease	Chapters 87, 88, 89, 90, 91, 92, 93, & 95 Chapter 87: Basic Principles of Antimicrobial Therapy Chapter 88: Drugs That Weaken the Bacterial Cell Wall I: Penicillins Chapter 89: Drugs That Weaken the Bacterial Cell Wall II: Other Drugs Chapter 90: Bacteriostatic Inhibitors of Protein Synthesis: Tetracyclines, Macrolides, and Others	ATI Pharm Made Easy:  MODULE: INFECTION  Introduction Antibacterials Complete all modules and test with at least 90%  Review Infectious Diseases Patho



Canvas Review Assignment on Antimicrobial Therapy  Week 14 May 22  Chemotherapy of Infectious Disease  Anti-virals, Anti-fungals, STI management	Chapter 91: Aminoglycosides: Bactericidal Inhibitors of Protein Synthesis Chapter 92: Sulfonamide Antibiotics and Trimethoprim Chapter 93: Drug Therapy for Urinary Tract Infections Chapter 95: Miscellaneous Antibacterial  Review KeyPoints for each chapter.  Practice Evolve questions and review rationales.  Review Nursing Implications for each chapter.  Chapters 96, 97, 98, 99, & 100 Chapter 96: Antifungal Agents Chapter 99: Drug Therapy for Sexually Transmitted Infections Chapter 100: Antiseptics and Disinfectants Chapter 97: Antiviral Agents I: Drugs for Non-HIV Viral Infections Chapter 98: Antiviral Agents II: Drugs for HIV Infection and Related Opportunistic Infections  Review KeyPoints for each chapter.  Practice Evolve questions and review rationales.  Review Nursing Implications for each chapter.	ATI Pharm Made Easy: MODULE: INFECTION Antifungals Antivirals MODULE: IMMUNE SYSTEM Drug Therapy for HIV Review Sexually Transmitted Diseases Patho Review Fungal and Viral Infections Patho
Week 15 May 29 (No Class) Endocrine	Chapters 60 & 61 Chapter 60: Drugs for Diabetes Mellitus Chapter 61: Drugs for Thyroid Disorders  Review KeyPoints for each chapter.  Practice Evolve questions and review rationales.  Review Nursing Implications for each chapter.	ATI Pharm Made Easy: MODULE: ENDOCRINE SYSTEM Introduction Drug therapy for Diabetes Mellitus Drug Therapy for Thyroid Disorders  Review Endocrine Diseases Patho
Week 16 June 5	Final Exam: Cumulative Exam: 80% of content will be from weeks 13, 14, & 15	

<sup>\*\*\*</sup>Subject to change without prior notice\*\*\*