

## Pharmacology II NURS 123 Course Syllabus\_rev 08 01 2022

#### **Basic Course Information**

			Julie Kunath MS APRN AGPCNP-AG
Semester:	FALL 2022	Instructor Name:	AACNS-AG CCRN-K CNE
Course Title &			
#:	Pharmacology II NURS 123	Email:	Julie.kunath@imperial.edu
		Webpage	
CRN #:	10540	(optional):	CANVAS
			Available via Zoom, Pronto, Text,
Classroom:	Bldg. 2100, room 2152	Office #:	etc.
			Mondays 1305-1505, Wednesdays
Class Dates:	08/15 – 12/9/2022	Office Hours:	1330-1430, Thursdays 1330-1400,
Class Days:	Mondays	Office Phone #:	(760) 355 - 6422
		Emergency	
Class Times:	0900 - 1035	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.

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 (limited), by email, by Zoom appt or during office hours via Zoom 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%	
<u>Final Exam</u>	<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 no more than 3 examinations in addition to written, demonstration, and oral assignments, 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 <u>http://www.imperial.edu/studentresources</u> 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 sessions and class activities.

<b>FALL 2022</b> <b>MONDAYS @ 0900 – 1025</b> WEEK/DATE TOPICS	Assigned Reading: Lehne's Pharm Text 10e Lehne's Pharm Text 11e	ATI
Week 1 August 15 -Seizures Overview and Management -CNS stimulants and depressants -Antidepressants Overview -Bipolar Disorder & mood-stabilizing drugs Overview -Anxiety Disorders Overview and Management	10e: Chapters 24, 32, 33, 35, & 36 Chapter 24: Drugs for Seizure Disorders Chapter 32: Antidepressants Chapter 33: Drugs for Bipolar Disorder Chapter 35: Management of Anxiety Disorders Chapter 36: Central Nervous System: Stimulants and Attention- Deficit/Hyperactivity Disorder 11e: Chapters 27, 34, 35, 36, 38 & 39 Ch 27: Drugs for Seizure Disorders P234 Ch 34: Antipsychotic Agents and Their Use in Schizophrenia p334 Ch 35: Antidepressants P351 Ch 36: Drugs for Bipolar Disorder p372 Ch 38: Management of Anxiety Disorders p395 Ch 39: Central Nervous System Stimulants and Attention- Deficit/Hyperactivity Disorder	<ul> <li>ATI Pharm Made Easy 4.0 (PME 4.0):</li> <li>MODULE: NEUROLOGICAL SYSTEM (PART 1)</li> <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> <li>MODULE: NEUROLOGICAL SYSTEM (PART 2)</li> <li>Drug Therapy for Anxiety Disorders</li> <li>Drug Therapy for Bipolar Disorder</li> <li>Drug Therapy for Schizophrenia</li> </ul>
Week 2 August 22 Upper & Lower Respiratory Drugs Tuberculosis Management	<ul> <li>10e: Chapters 70, 76, 77 &amp; 90</li> <li>Chapter 70: Antihistamines</li> <li>Chapter 77: Drugs for Allergic Rhinitis,</li> <li>Cough, and Colds</li> <li>Chapter 76: Drugs for Asthma and</li> <li>Chronic Obstructive Pulmonary Disease</li> <li>Chapter 90: Antimycobacterial Agents:</li> <li>Drugs for Tuberculosis, Leprosy, and</li> <li>Mycobacterium avium Complex</li> <li>Infection</li> <li>11e: Chapters 73, 79, 80, &amp; 94</li> <li>Ch 73: Antihistamines</li> <li>Ch 79: Drugs for Asthma &amp; Chronic</li> <li>Obstructive Pulmonary Disease p911</li> <li>Ch 80: Drugs for Allergic Rhinitis, Cough, and Colds p939</li> </ul>	<ul> <li>ATI Pharm Made Easy:</li> <li>MODULE: RESPIRATORY SYSTEM</li> <li>Introduction</li> <li>Drug Therapy for Non-Infectious Lower Respiratory Airflow Disorders</li> <li>Drug Therapy for Upper Respiratory Disorders</li> <li>Complete module &amp; test w/at least 85%</li> </ul>



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	Ch 94: Antimycobacterial Agents p1083	
Week 3 August 29	<b>10e: Chapters 25 &amp; 34</b> Chapter 25: Drugs for Muscle Spasm	ATI Pharm Made Easy: MODULE: NEUROLOGICAL SYSTEM (PART 1)
Drugs for Spasticity Drugs for Localized Muscle Spasm Other Centrally Acting Muscle Relaxants Management of Insomnia & Use of Sedative-Hypnotic Drugs	and Spasticity <u>Chapter 34</u> : Sedative-Hypnotic Drugs <b>11e: Chapters 28 &amp; 37</b> Ch 28: Drugs for Muscle Spasm and Spasticity p262	<ul> <li>Drug Therapy for Muscle Spasms</li> <li>ATI Pharm Practice Quiz</li> </ul>
Week 4	Ch 37: Sedative-Hypnotic Drugs p380 EXAM 1: All content from weeks 1, 2,	
September 5 (No Class) (LABOR DAY)	& 3	
Week 5 September 12 Cyclooxygenase Inhibitors: NSAIDs and Acetaminophen Arthritis/Gout	10e: Chapters 71, 72, 73, & 74 Chapter 71: Cyclooxygenase Inhibitors: Nonsteroidal Anti-Inflammatory Drugs and Acetaminophen Chapter 72: Glucocorticoids in Nonendocrine Disorders Chapter 73: Drug Therapy for Rheumatoid Arthritis Chapter 74: Drug Therapy for Gout 11e: Chapters 74, 75, 76, & 77 Chapter 74: Cyclooxygenase Inhibitors: Nonsteroidal Anti-Inflammatory Drugs and Acetaminophen Chapter 75: Glucocorticoids in Nonendocrine Disorders Chapter 76: Drug Therapy for Rheumatoid Arthritis Chapter 77: Drug Therapy for Gout	<ul> <li>ATI Pharm Made Easy:</li> <li>MODULE: PAIN AND INFLAMMATION <ul> <li>Introduction</li> <li>Drug Therapy for Pain</li> <li>Drug Therapy for Inflammation</li> <li>Complete modules and test w/ at least 90%</li> </ul> </li> <li>MODULE: MUSCULOSKELETAL SYSTEM <ul> <li>Drug Therapy for Rheumatoid Arthritis</li> </ul> </li> <li>Review Musculoskeletal Diseases Patho</li> </ul>
Week 6 September 19 Parkinson Disease and Management	<b>10e: Chapter 21 &amp; 22</b> Chapter 21: Drugs for Parkinson Disease Chapter 22: Drugs for Alzheimer's Disease	(PART 1) Drug Therapy for Parkinson's Disease
Alzheimer's Disease and Management	<b>11e: Chapters 24 &amp; 25</b> Chapter 24: Drugs for Parkinson Disease Chapter 25: Drugs for Alzheimer's Disease	<ul> <li>Drugs that Treat Alzheimer's Disease</li> <li>Review Parkinson &amp; Alzheimer's Diseases</li> <li>Patho</li> </ul>
Week 7 September 26 Gl	<b>10e: Chapter 78, 79, &amp; 80</b> Chapter 78: Drugs for Peptic Ulcer Disease Chapter 79: Laxatives	ATI Pharm Made Easy: MODULE: GASTROINTESTINAL SYSTEM Introduction Drug Therapy for Peptic Ulcers
PUD meds, Anti-diarrheal & laxatives, anti- emetics	Chapter 80: Other Gastrointestinal Drugs	<ul> <li>Drug Therapy for Nausea</li> <li>Drug Therapy for Constipation</li> </ul>



	<b>11e: Chapters 52, 53, 54, 55, &amp; 56</b> Chapter 52: Antidysrhythmic Drugs	Quizlet Review
	Elevation Myocardial Infarction	Review Cardiovascular Diseases Patho
Angina/MI/Coagulation Dysrhythmias/Shock	Chapter 50: Prophylaxis of Atherosclerotic Cardiovascular Disease: Drugs That Help Normalize Cholesterol and Triglyceride Levels Chapter 51: Drugs for Angina Pectoris Chapter 52: Anticoagulant, Antiplatelet, and Thrombolytic Drugs Chapter 53: Management of ST-	<ul> <li>Drug therapy for Coronary Heart Disease</li> <li>Drug therapy for cardiac dysrhythmias</li> <li>MODULE: HEMATOLOGIC SYSTEM</li> <li>Thromboembolic Drugs: Drug Therapy to Prevent and Dissolve</li> </ul>
Week 10 October 17	<b>10e: Chapter 49, 50, 51, 52, &amp; 53</b> Chapter 49: Antidysrhythmic Drugs	ATI Pharm Made Easy: MODULE: CARIOVASCULAR SYSTEM
	Chapter 48: Drugs for Heart Failure <b>11e: Chapters 44, 46, 47, 48, 49, 50, &amp;</b> <b>51</b> 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	ATI Practice Exam B
Cardiovascular Drugs Heart Failure	Chapter 41: Diuretics Chapter 43: Review of Hemodynamics Chapter 44: Drugs Acting on the Renin- Angiotensin-Aldosterone System Chapter 45: Calcium Channel Blockers Chapter 46: Vasodilators Chapter 47: Drugs for Hypertension	<ul> <li>Drug therapy for Hypertension</li> <li>Drug therapy for Heart Failure</li> <li>Review Cardiovascular Diseases Patho</li> <li>Review Cardiovascular and Renal</li> <li>Physiology</li> </ul>
Week 9 October 10	10e: Chapter 41, 43, 44, 45, 46, 47, & 48	ATI Pharm Made Easy: MODULE: CARIOVASCULAR SYSTEM
Week 8 October 3	Exam 2	ATI Practice Exam A
	<b>11e: Chapters 81, 82, &amp; 83</b> Chapter 81: Drugs for Peptic Ulcer Disease Chapter 82: Laxatives Chapter 83: Other Gastrointestinal Drugs	<ul> <li>Drug Therapy for Diarrhea</li> <li>Drug Therapy for Inflammatory Bowel Disease</li> <li>Complete modules and test with at least 90%</li> <li>Review GI Diseases Patho</li> </ul>



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	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		
Week 11 October 24 Hematopoietic Disorders and Management	<b>10e: Chapter 55 &amp; 56</b> Chapter 55: Drugs for Deficiency Anemias Chapter 56: Hematopoietic Agents	<ul> <li>ATI Pharm Made Easy:</li> <li>MODULE: HEMATOLOGIC SYSTEM</li> <li>Drug Therapy for Anemia</li> <li>Drug therapy that supports hematopoiesis</li> </ul>	
	<b>11e: Chapters 58 &amp; 59</b> Chapter 58: Drugs for Deficiency Anemias Chapter 59: Hematopoietic Agents	Review Anemia Patho Review Hematopoietic Physiology and Pathophysiology	
Week 12 October 31	Exam 3		
Week 13 November 7	<b>Chapter 83, 84, 85, 86, 87, 88, 89, &amp; 91</b> Chapter 83: Basic Principles of Antimicrobial Therapy	ATI Pharm Made Easy: MODULE: INFECTION	
Chemotherapy of Infectious Disease	Chapter 84: Drugs That Weaken the Bacterial Cell Wall I: Penicillins Chapter 85: Drugs That Weaken the Bacterial Cell Wall II: Cephalosporins,	<ul> <li>Antibacterials</li> <li>Complete all modules and test with at least 90%</li> </ul>	
Canvas Review Assignment on Antimicrobial Therapy	Carbapenems, Vancomycin, Telavancin, Aztreonam, and Fosfomycin	Review Infectious Diseases Patho	
	Chapter 86: Bacteriostatic Inhibitors of Protein Synthesis: Tetracyclines, Macrolides, and Others Chapter 87: Aminoglycosides: Bactericidal Inhibitors of Protein Synthesis Chapter 88: Sulfonamides and Trimethoprim Chapter 89: Drug Therapy for Urinary Tract Infections Chapter 91: Miscellaneous Antibacterial Drugs: Fluoroquinolones, Metronidazole, Daptomycin, Rifampin, Rifaximin, and Fidaxomicin <b>11e: Chapters 87, 88, 89, 90, 91, 92, 93, &amp; 95</b> Chapter 87: Basic Principles of Antimicrobial Therapy	ATI Comprehensive Pharmacology Exam (proctored)	



	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 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	
Week 14	Chapter 92, 93, 94, 95, & 96	ATI Pharm Made Easy:
November 14 Chemotherapy of Infectious Disease	Chapter 92: Antifungal Agents Chapter 95: Drug Therapy for Sexually Transmitted Infections Chapter 96: Antiseptics and	MODULE: INFECTION  Antifungals Antivirals MODULE: IMMUNE SYSTEM
Anti-virals, Anti-fungals, STI management	Disinfectants Chapter 93: Antiviral Agents I: Drugs for Non-HIV Viral Infections Chapter 94: Antiviral Agents II: Drugs for HIV Infection and Related Opportunistic Infections	<ul> <li>Drug Therapy for HIV</li> <li>Review Sexually Transmitted Diseases Patho</li> <li>Review Fungal and Viral Infections Patho</li> <li>ATI Comprehensive retake</li> </ul>
	<b>11e: Chapters 96, 97, 98, 99, &amp; 100</b> 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	
Holiday Break Week November 21 (No Class)		
Week 15 November 28	Chapter 57 & 58 Chapter 57: Drugs for Diabetes Mellitus Chapter 58: Drugs for Thyroid Disorders	ATI Pharm Made Easy: MODULE: ENDOCRINE SYSTEM Introduction Drug therapy for Diabetes Mellitus
Endocrine	<b>11e: Chapters 60 &amp; 61</b> Chapter 60: Drugs for Diabetes Mellitus Chapter 61: Drugs for Thyroid Disorders	<ul> <li>Drug Therapy for Thyroid Disorders</li> <li>Review Endocrine Diseases Patho</li> </ul>



Week 16	Final Exam: Cumulative Exam: 80% of	
December 5	content will be from weeks 13, 14, &	
	15	

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