# Nurs Pharm II

# NRSG1220 501

# **Course Description**

This course utilizes the nursing process, reinforces safe administration of medications while providing evidence-based, patient-centered care. Corresponds to disease processes concurrent with learning in NRSG 1200 & 1205. Second Pharmacology class in a series of four.

Pre-Requisite(s): PSY 1100 OR FHS 1500 and the completion of prior semester courses per established curriculum plan. Semester(s) Taught: All

This course utilizes the nursing process, reinforces safe administration of medications while providing evidence-based, patient-centered care. Corresponds to disease processes concurrent with learning in NRSG 1200 & 1205. Second Pharmacology class in a series of four.

## **Course Student Learning Outcomes**

- Describe skills used in verbal, non-verbal, and written communication with nurses, patients, significant support persons, and other members of the healthcare team and community agencies when providing medications for patients.
- Discuss and apply the nursing process and critical thinking skills to begin making clinical judgments while participating in the identification of problems, the evaluation of the effectiveness of medications.
- Describe and utilize the nursing process and therapeutic communication skills to develop and implement an individualized teaching plan which will provide medication education to patients and their significant support persons thereby facilitating informed decision making, achieving positive outcomes, and supporting self-care.

• Apply principles of pharmacology, pharmacokinetics, and pharmacodynamics to medication therapy for patients with selected health alterations.

#### **Course Prerequisites**

 Completion of prior semester courses per established curriculum plan. NRSG 1120 Pharmacology I

## **Communication Plan**

- I will respond to email within 24-48 hours. I will offer feedback on major assignments within 1-2 weeks. The best way to contact me is via the Canvas Inbox, as I will prioritize this email over other modes of communication.
- Additionally, I will be commenting on the discussion assignments to add insight on practice that may not be highlighted in the textbook.
- Lastly, we'll be holding small group Q & A sessions, where we can learn from our peers (and faculty) prior to the midterm and final to review difficult content.

## **Required Text or Materials**

Title: Abrams' Clinical Drug Therapy: Rationales for Nursing Practice ISBN: 978-1-975155-87-2 Authors: Frandsen Geralyn; Pennington Sandra S Publisher: Wolters Kluwer Edition: 12th Edition

For more information on textbook accessibility, contact Accessibility & Disability Services at <u>ads@slcc.edu</u>.

## Assignment Schedule

Due Date	Assignment Name	Assignment Type	Points
	Cardiac Medication Discussion	Discussion	0
	Math Test Grade	Assignment	100
	<u>Student Syllabus</u> <u>Acknowledgement</u> <u>Page</u>	Assignment	0
9/21	<u>Week 1 Quiz: Drugs</u> for Coronary Artery Disease and ANGINA	Quiz	17
9/28	<u>Week 2 Quiz: Drugs</u> to Treat Heart Failure	Quiz	17
10/5	<u>Week 3 Quiz: Drugs</u> <u>to Treat</u> <u>Hypertension and</u> <u>Vascular Disorders</u>	Quiz	19
10/11	NRSG 1220 Math Test	Quiz	50
10/11	Cardiovascular Medication Discussion	Discussion	15
10/12	<u>Week 4 Quiz: Drugs</u> to Treat Fluid and <u>Electrolyte Disorders</u>	Quiz	21
10/19	<u>Week 5 Quiz: Drugs</u> <u>to Treat Upper</u> <u>Respiratory</u> <u>Disorders</u>	Quiz	14
11/1	NRSG 1220 Midterm	Quiz	56
11/9	<u>Respiratory</u> <u>Medication Discussion</u>	Discussion	15

Due Date	Assignment Name	Assignment Type	Points
11/30	Gastrointestinal Medication Discussion	Discussion	25
12/12	NRSG 1220 Final	Quiz	45

## Brief Description of Assignments/Exams

#### Exams: 60%

- Midterm Cumulative Exam- 20%
- Comprehensive Final- 20%
- Math Grade 20% (Average of individual math attempts) See explanation below.
- Math Exam: As math is a critical component of medication administration, students are required to pass a math exam. A score of 85% on the math exam is required. Any student scoring less than 85% must retake the exam (maximum of 3 attempts). Failure to pass the third math exam with 85% will result in failure of the course.
- If a student does not reach a score of 85% on the first math exam: before taking the second math exam the student must meet with course instructor to review previous math exam and complete remediation identified by course instructor.
- If a student does not reach a score of 85% on the second math exam: before taking the third math exam the student must meet with the course instructor to review previous math exam and complete remediation/interventions identified by course instructor.
- After a student has achieved a passing 85% on a math test, all attempts on the math test will be combined for a math grade that will be entered into the gradebook and is worth 12%. The possible math grade average decreases if a student requires multiple attempts to pass the math test. (See below)
- The recorded math grade will be an average of the math exams but will not exceed 85% when two exams were required to pass and will not exceed 80% when all

three exams were required to achieve a passing grade on a math test.

- The math test must be passed with an 85%. A student must meet this percentage requirement on an individual exam. The student must meet the requirements to pass the math test before the average of the math tests can be entered into the gradebooks for the Recorded Math Grade.
- The math grade is the average of all math tests taken and as the student must have already passed the math test is for grading purposes only.

#### Assignments 40%

• Open Book Quizzes: 22%

Weekly quizzes will be given on canvas. The quiz is timed to encourage students to be familiar with content. The quiz however is open book, so students are allowed to use resource materials such as textbook, course notes, and online resources. The quiz will test on the content from the module. Each quiz will also have a minimum of 1 math question. As the quizzes are not proctored, they will not be included in the 78% average.

#### • Discussions: 18%

There are 3 discussions on course content spread throughout the modules. Each discussion is worth 15-25 points. The discussions encourage students to apply module content. Refer to canvas and rubric for assignment specifics.

For specifics on Exams and Quizzes see course calendar in canvas orientation module.

#### **Grading Scale**

- A minimum grade of C+ (78.0%) must be achieved in all didactic nursing courses to be eligible to progress from one semester to the next semester and to graduate from the nursing program.
- A passing grade must be achieved in all clinical nursing courses to be eligible to progress from one semester to the next semester and to graduate from the nursing

program.

- Students must achieve a 78.0% average on all proctored exams and proctored quizzes (as designated by instructor) before additional coursework can be factored in. The 78% must be achieved without rounding.
- Grades are computed following a scale that is approved by Salt Lake Community College.

Students are required to achieve a minimum of 78% (C+) average on all proctored exams and proctored quizzes before additional course work is factored in. The 78% exam average must be achieved without rounding. Students must ALSO achieve a minimum of 78% (C+) in the overall course. Any student who does not meet these minimum requirements will not be allowed to advance to the following semester courses nor graduate. The student will be required to follow the policy outlined in the Nursing Program handbook which may include repeating the course (on a space available basis), repeating associated course (on a space available basis, or removal from the program.

Nursing Department Grading Scale:

A 95-100
A- 90-94
B+ 87-89
B 83-86
B- 80-82
C+ 78-79*
C 75-77
C- 71-74
D+ 67-70
D 64-66

E Below 64

\* Students must achieve a 78.0% average on all proctored exams and proctored quizzes (as designated by instructor) before additional coursework can be factored in. The 78% must be achieved without rounding of other scores.

Grading Criteria:

Exams and Proctored Quizzes: 60%

Assignments: 40%

#### How to Navigate to Canvas

#### Online Tutoring

Students at SLCC have access to online tutoring through Canvas. From your Canvas course click Online Tutoring in the course navigation and follow the steps to set up an appointment. If this is your first time using the Online Tutoring we recommend you click "Take a Tour" to familiarize yourself with the service.

Note that students only receive 480 minutes of tutoring time each semester. After that we encourage you to use the resources found through this link: <u>https://www.slcc.edu/tutoring/index.aspx</u>

If you have any additional questions reach out to

#### **Institutional Policies**

As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements. By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone. You can access the document by clicking on the following link: <u>https://slcc.instructure.com/courses/530981/pages/institutional-syllabus</u>

## Learning Support and Tutoring Services

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, please visit the Institutional Syllabus under the Tutoring and Learning Support tab: <u>https://slcc.instructure.com/courses/530981/pages/institutional-syllabus</u>. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

# Advising and Counseling Support Services

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to access them, please visit the Institutional Syllabus under the Advising and Counseling Support Services tab: <u>https://slcc.instructure.com/courses/530981/pages/institutional-syllabus</u>. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

#### Student Academic Calendar

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

SLCC Student Academic Calendar

## **Additional Policies**

Testing:

Weekly quizzes are open book on canvas and therefore can be taken remotely These quizzes are NOT considered to be proctored quizzes and will NOT be factored into the 78% average.

The Math Exams, Midterm Exam and Comprehensive Final will only be available in the Campus Testing Centers. Exam dates are posted on the class calendar and the exam may be scheduled through register blaster.

Late Work and Late Testing: It is expected that students submit work and attend testing at mandatory dates and times. Late work and testing (including quizzes) may not be accepted by instructors. If accepted, it may be subject up to a 10% reduction per day.

Academic dishonesty (Cheating): Honesty is an expectation at Salt Lake Community College, and within the Nursing Program. Any act of academic dishonesty is considered unprofessional behavior and a serious offense requiring disciplinary measures. Academic dishonesty will NOT be tolerated. Please see the SLCC Code of Student Rights and Responsibilities and the Nursing Student Handbook for additional information.

Wireless Devices in the Classroom:

The advent of technology use in the classroom as an instructional tool has caused both opportunities and distractions. The expectations for this course are that you are engaged and present during class time, which means that you will be free from technological distractions.

Research has shown that these distractions cause individual inattentiveness and can make it difficult for others to stay focused on the immediate discussions. The following policies are in effect during our time together:

1. Cell phones, iPods, pagers, High-Resolution DVR Spy Pens with webcam and microphone or any other technological device (excluding DRC authorized devices) that may distract from the class should be silenced before entering the classroom and may not be on the desk during class or exams. If you have an emergency and must use your cell phone, please exit the classroom to take the call. If you are discovered

reading/sending text messages during class, you could be asked to leave the class and will be counted absent for that class session.

2. You are expected to engage in discussion for the class. You may use your computer to access your textbook, take notes, and research the discussion topic. However, some students may find it difficult to refrain from reading emails, surfing the web, and engaging in other activities not related to the class. Therefore, if you are discovered engaging in computer activities not directly related to the class, you will be asked to leave the class and will be counted absent for that class session.

3. You may not record, photograph, or publish information from the class without written authorized use from the instructor. If used without authorization you have violated

PRIVACY/INTELLECTUAL PROPERTY RIGHTS.

#### Course Content

#### **Course Content**

Module 1: Drugs Affecting the Cardiovascular and Hematological System

After completion of this Learning Module, the student will be able to:

- 1. Independently review anatomy and physiology of the cardiovascular system.
- 2. Independently review the components of blood and the clotting cascade.
- 3. Identify each classification of drugs affecting the cardiovascular and hematological system.
- Identify and differentiate the major actions of each classification of drugs affecting the cardiovascular and hematologic system.
- Cardiac glycosides
- Nitrates
- Beta-Adrenergic Blockers
- Beta Blockers
- Calcium Channel Blockers
- Ace Inhibitors

- Angiotensin II Receptor Antagonists
- Direct Renin Inhibitors
- Anticoagulants
  - 1. Heparins
  - 2. Vitamin K Antagonists: Warfarin
- Antiplatelets
- Dyslipidemia Drugs
  - HMA-CoA Reductase Inhibitors- Statins
- Identify the generic and trade names and classifications of common drugs affecting the cardiovascular and hematologic system.
- Identify drug prototype for each classification affecting the cardiovascular and hematologic system.
- 1. Utilize the nursing process to explain the nursing implications for the drugs that affect the cardiovascular and hematological system.
- Describe the pharmacodynamic, pharmacokinetic, and pharmacotherapeutic effects of each drug classification prototype.
- Identify the potential adverse effects and contraindications of drug classification prototypes.
- Identify dosage, therapeutic range, and route of administration of drug classification prototypes.
- Identify clinical nursing interventions for each drug classification prototype to maximize therapeutic effects and minimize adverse effects.
  - Identify similarities and differences between common drugs affecting the central nervous system and their drug classification prototypes.

5. Utilize the nursing process and critical thinking to discuss the professional role of the nurse as it relates to the use and administration of cardiovascular system drugs.

• Discuss the client education required for safe administration and compliance of cardiovascular system drugs.

• Describe the use of therapeutic communication and nursing interventions in providing client and family teaching.

Module 2: Drugs Affecting the Renal System

After completion of this Learning Module, the student will be able to:

- 1. Independently review the anatomy and physiology of the renal system.
- 2. Recognize each classification of drugs affecting the renal system.
- Identify and differentiate the major actions of each classification of drugs affecting the renal system.
- Diuretics
  - ∘ loop
  - thiazide
  - potassium-sparing
- Identify a drug prototype for each classification affecting the renal system.
- Identify the generic and trade names and classifications of common drugs affecting the renal system.

3. Utilize the nursing process to explain the nursing implications for the drugs that affect the renal system.

- Describe the pharmacodynamic, pharmacokinetic, and pharmacotherapeutic effects of each drug classification prototype.
- Identify the potential adverse effects and contraindications of drug classification prototypes.
- Identify dosage, therapeutic range, and route of administration of drug classification prototypes.

- Identify clinical nursing interventions for each drug classification prototype to maximize therapeutic effects and minimize adverse effects.
- Identify similarities and differences between common drugs affecting the central nervous system and their drug classification prototypes.
- Identify the common electrolyte disturbances in culturally diverse clients receiving diuretic therapy.

4. Utilize the nursing process and critical thinking to discuss the professional role of the nurse as it relates to the use and administration of renal system drugs.

- Discuss the client education required for safe administration and compliance of renal system drugs.
- Describe the use of therapeutic communication and nursing interventions in providing client and family teaching.

Module 3: Intravenous Therapy and Drugs Affecting Electrolyte Balance

After completion of this Learning Module, the student will be able to:

- 1. Independently review:
  - Fluid balance within the body.
- 2. Utilize the nursing process to identify the nursing assessment for the client receiving intravenous therapy or medications to control electrolyte imbalances.
  - Identify and discuss indications of intravenous therapy
  - Identify and discuss the difference between isotonic, hypotonic and hypertonic solutions.
- 3. Recognize the classification of drugs affecting Electrolyte and Fluid Balance.
  - Sodium Zirconium Cyclosilicate

- Intravenous insulin/Dextrose
- Potassium
- Magnesium Sulfate
- Calcium
- Calcium Acetate
- Lactated Ringers
- 0.9 Normal Saline
- D5W
- 3%NS
- Identify the generic and trade names and classifications of common drugs affecting the fluid/electrolyte balance.
- 4. Utilize the nursing process to explain the nursing implications for the drugs that affect the fluid and electrolyte balance.
  - Describe the pharmacodynamic, pharmacokinetic, and pharmacotherapeutic effects of each drug classification prototype.
  - Identify the potential adverse effects and contraindications of drug classification prototypes.
  - Identify dosage, therapeutic range, and route of administration of drug classification prototypes.
  - Identify clinical nursing interventions for each drug classification prototype to maximize therapeutic effects and minimize adverse effects.

4. Utilize the nursing process and critical thinking to discuss the professional role of the nurse as it relates to the use and administration of respiratory drugs.

- Discuss the client education required for safe administration.
- Describe the use of therapeutic communication and nursing interventions in providing client and family teaching.

Module 4: Drugs Affecting the Respiratory System

After completion of this Learning Module, the student will be able to:

- 1. Independently review the anatomy and physiology of the respiratory system.
- 2. Recognize each classification of drugs affecting the respiratory system.
  - Identify and differentiate the major actions of each classification of drugs affecting the respiratory system.
  - Antihistamine
  - Expectorants
  - Mucolytics
  - Antitussives
  - Decongestants
  - Bronchodilators
    - beta agonists
    - anticholinergics
  - Anti-inflammatory agents
    - inhaled glucocorticoid steroids
    - leukotriene receptor antagonists
  - Identify the generic and trade names and classifications of common drugs affecting the respiratory system.
  - Identify drug prototype for each classification affecting the respiratory system.

3. Utilize the nursing process to explain the nursing implications for the drugs that affect the respiratory system.

- Describe the pharmacodynamic, pharmacokinetic, and pharmacotherapeutic effects of each drug classification prototype.
- Identify the potential adverse effects and contraindications of drug classification prototypes.
- Identify dosage, therapeutic range, and route of administration of drug classification prototypes.

- Identify clinical nursing interventions for each drug classification prototype to maximize therapeutic effects and minimize adverse effects.
- Identify similarities and differences between common drugs affecting the central nervous system and their drug classification prototypes.
- Describe the proper use of a metered dose inhaler.

4. Utilize the nursing process and critical thinking to discuss the professional role of the nurse as it relates to the use and administration of respiratory drugs.

- Discuss the client education required for safe administration and compliance of respiratory system drugs.
- Describe the use of therapeutic communication and nursing interventions in providing client and family teaching.

Module 5: Drugs Affecting the Immune System

After completion of this Learning Module, the student will be able to:

1. Independently review the anatomy and physiology of the immune system.

2. Independently review the inflammatory process.

3. Independently review drugs used for treating fever and inflammation learned in NRSG 1120.

- Nonsteroidal anti-inflammatory drugs
  - 1. Salicylates
  - 2. prostaglandin synthesis inhibitors
  - 3. Cox-2 Inhibitors
- Para-aminophenol derivatives
- Acetic Acid Derivatives

4. Identify each classification of drugs affecting the immune system and inflammatory response.

- 1. Miscellaneous antibiotics
  - 1. Fluoroquinolones
- 2. Drugs for treating urinary tract infections.
  - 1. Sulfonamides
  - 2. Urinary tract antiseptics
  - 3. Urinary tract analgesic
- Identify a drug prototype for each classification affecting the immune system and inflammatory response.
- Identify the generic and trade names and classifications of common drugs affecting the immune system and inflammatory process.

5.Utilize the nursing process to explain the nursing implications for the drugs that affect the immune system and inflammatory response.

- Describe the pharmacodynamic, pharmacokinetic, and pharmacotherapeutic effects of each drug classification prototype.
- Identify the potential adverse effects and contraindications of drug classification prototypes.
- Identify dosage, therapeutic range, and route of administration of drug classification prototypes.
- Identify clinical nursing interventions for each drug classification prototype to maximize therapeutic effects and minimize adverse effects.
- Identify similarities and differences between common drugs affecting the central nervous system and their drug classification prototypes.
- Differentiate between bacteriostatic and bactericidal drugs.
- 1. Utilize the nursing process and critical thinking to discuss the professional role of the nurse as it relates to the use and administration of medications affecting the immune system and inflammatory response.

- Discuss the client education required for safe administration and compliance of immune system drugs.
- Describe the use of therapeutic communication in providing client and family teaching.
- Discuss therapeutic nursing interventions to prevent the spread of infection.

Module 5: Drugs Affecting the Gastrointestinal System

After completion of this Learning Module, the student will be able to:

1. Independently review the anatomy and physiology of the gastrointestinal system.

2. Recognize each classification of drugs affecting the gastrointestinal system.

- Identify and differentiate the major actions of each classification of drugs affecting the gastrointestinal system.
- Antacids
- Proton pump inhibitors
- H2 receptor antagonists
- Antiemetics
  - 1. Serotonin Receptor Antagonists
- Gastrointestinal stimulants
- Antidiarrheals
- Laxatives
  - bulk-forming
  - stool softeners

- Identify a drug prototype for each classification affecting the gastrointestinal system.
- Identify the generic and trade names and classifications of common drugs affecting the gastrointestinal system.

3.Utilize the nursing process to explain the nursing implications for the drugs that affect the gastrointestinal system.

- Describe the pharmacodynamic, pharmacokinetic, and pharmacotherapeutic effects of each drug classification prototype.
- Identify the potential adverse effects and contraindications of drug classification prototypes.
- Identify dosage, therapeutic range, and route of administration of drug classification prototypes.
- Identify clinical nursing interventions for each drug classification prototype to maximize therapeutic effects and minimize adverse effects.
- Identify similarities and differences between common drugs affecting the central nervous system and their drug classification prototypes.

4.Utilize the nursing process and critical thinking to discuss the professional role of the nurse as it relates to the use and administration of gastrointestinal system drugs.

- Discuss the client education required for safe administration and compliance of gastrointestinal system drugs.
- Describe the use of therapeutic communication and nursing interventions in providing client and family teaching.

Module 7: Drug Therapy for Neurological Disorders and Injuries

After completion of this Learning Module, the student will be able to:

- 1. Independently review narcotic analgesics from Pharmacology I NRSG 1120.
  - 1. strong narcotic agonists
  - 2. narcotic agonist-antagonists
  - 3. narcotic antagonist
  - 4. Independently review the anatomy and physiology of the central nervous system.
  - 5. Identify each classification of drugs affecting the central nervous system.
    - Identify and differentiate the major actions of each classification of drugs affecting the central nervous system.
      - 1. Depressants
        - 1. centrally acting muscle relaxants and Anti-spasmolytics
          - 1. Gamma-Aminobutyric Acid Derivatives
          - 2. Direct-Acting Skeletal Muscle Relaxants
          - 3. Tricyclic Antidepressant Derivatives
        - 2. Drugs used for Myasthenia Gravis
          - 1. Acetylcholinesterase Inhibitors
        - 3. Drugs used to treat Parkinson's Disease
          - 1. Dopamine Receptor Agonists
      - 2. Identify the drug prototype for each classification affecting the central nervous system.
        - Identify the generic names, trade names and classifications of common drugs affecting the central nervous system.
    - Identify the potential adverse effects and contraindications of drug classification prototypes.
    - Identify dosage, therapeutic range, and route of administration of drug classification prototypes.
    - Identify clinical nursing interventions for each drug classification prototype to maximize therapeutic effects and minimize adverse effects.
    - Identify similarities and differences between common drugs affecting the central nervous system and their drug classification prototypes.

- 6. Utilize the nursing process and critical thinking to discuss the professional role of the nurse as it relates to the use and administration of central nervous system drugs.
  - Discuss the client education required for safe administration and compliance of central nervous system drugs.
  - Describe the use of therapeutic communication in providing client and family teaching.
  - Discuss therapeutic nursing interventions to prevent misuse and abuse of central nervous system medications.

#### Student Signature Page



Student Acknowledgement

Initial All and Sign Below

\_\_\_\_\_ I have received, read, and understand the syllabus (and addendum(s)) for NRSG 1220 Nursing Pharmacology II.

\_\_\_\_\_ I understand that it is my responsibility to acquire and utilize all of the books, tutorials, assignments, and online resources required for this course.

\_\_\_\_\_ I understand that it is my responsibility to acquire and utilize all of the books, tutorials, assignments, and online resources available from Lippincott CoursePoint.

\_\_\_\_\_ I understand that discussing or revealing the content of exam questions to other students or discussing or receiving the content of exam questions from other students is considered cheating and may result in disciplinary measures. (See SLCC Student Code

of Rights and Responsibilities http://www.slcc.edu/policies/policies/student\_affairs/8.1.050.aspx)

\_\_\_\_\_I understand that discussing content of Lab Simulations and Clinical Check Offs with other students, or receiving the content of such, is considered cheating and may result in disciplinary measures. (See SLCC Student Code of Rights and Responsibilities http://www.slcc.edu/policies/policies/student\_affairs/8.1.050.aspx)

\_\_\_\_\_ I understand that if I am not meeting performance levels then I will be required to meet with nursing faculty and complete a performance plan.

Student Printed Name Date

Student Signature