



Course Syllabus

VNSG 1231-Pharmacology

Catalog Description: Fundamentals of medications and their diagnostic, therapeutic, and curative effects. Includes nursing interventions utilizing the nursing process and clinical judgment model.

Prerequisites: BIOL 2404, admission to VN Program

Co-requisites: VNSG 1304, 1400, 1226, 1323, 1261

Semester Credit Hours: 2

Lecture Hours per Week: 2

Lab Hours per Week: 1

Extended hours: 0

Contact Hours per Semester: 48

State Approval Code: 51.3901

Class section meeting time: See your CANVAS Course HOME page for required meeting days and times.

Alternate Operations During Campus Closure: In the event of an emergency or announced campus closure due to a natural disaster or pandemic, it may be necessary for Panola College to move to altered operations. During this time, Panola College may opt to continue delivery of instruction through methods that include, but are not limited to: online learning management system (CANVAS), online conferencing, email messaging, and/or an alternate schedule. It is the responsibility of the student to monitor Panola College's website (www.panola.edu) for instructions about continuing courses remotely, CANVAS for each class for course-specific communication, and Panola College email for important general information.

Use of generated AI Permitted under some classroom circumstances with permission.

There are situations throughout the course where you may be asked to use artificial intelligence (AI) tools to explore how they can be used. Outside of those circumstances, you should not use AI tools to generate content that will end up in any student work (assignments, activities, discussion responses, etc.). In such cases, no more than 25% of the student work should be generated by AI. Use of any AI-generated content in this course without the instructor's consent qualifies as academic dishonesty and violates Panola College's standards of academic integrity.

Instructional Goals and Purposes: The purpose of this course is to teach fundamental principles, properties, and effects of pharmacotherapeutic agents. Students will learn safe practice as a vocational nurse for use of pharmacotherapeutic interventions for patient care utilizing the nursing process and clinical judgment model.

Learning Outcomes:

1. Identify properties, effects, and principles of pharmacotherapeutic agents
2. Explain nursing interventions associated with the various pharmacotherapeutic agents.

Specific Course Objectives (includes SCANS):

After studying all materials and resources presented in the course, the student will be able to:

1. Identify properties and effects of drug classes. (SCANS 1; a; i, ii, iii, iv, v, b; i, ii, iii, iv, v, vi, c; i, v, 2; a; i, b; i, ii, iii, iv, v, vi, c; i, ii, iii, iv, d; i, ii, iii, e; i, ii)
2. Identify principles of administration for safe use of pharmacotherapeutic agents. (SCANS 1; a; i, ii, iii, iv, v, b; i, ii, iii, iv, v, vi, c; i, v, 2; a; i, b; i, ii, iii, iv, v, vi, c; i, ii, iii, iv, d; i, ii, iii, e; i, ii)
3. Differentiate appropriate nursing interventions associated with various pharmacotherapeutic agents using clinical reasoning. (SCANS 1; a; i, ii, iii, iv, v, b; i, ii, iii, iv, v, vi, c; i, v, 2; a; i, b; i, ii, iii, iv, v, vi, c; i, ii, iii, iv, d; i, ii, iii, e; i, ii)
4. Explain rationales for nursing intervention associated with the various pharmacotherapeutic agents following the clinical judgment model. (SCANS 1; a; i, ii, iii, iv, v, b; i, ii, iii, iv, v, vi, c; i, v, 2; a; i, b; i, ii, iii, iv, v, vi, c; i, ii, iii, iv, d; i, ii, iii, e; i, ii)

Course Content: A general description of lecture/discussion topics included in this course are listed in the Learning Objectives / Specific Course Objectives sections of this syllabus.

Students in all section of this course will learn the following content:

- Anti-inflammatory drugs
- Drugs for pain control
- Anti-infective/antibacterial drugs
- Anti-infective/antiviral drugs
- Anti-infective/anti-tubercular and antifungal
- Drugs that affect the immune system
- Drug therapy for endocrine problems
- Drug therapy for problems for the circulatory and cardiac systems
- Drug therapy for respiratory system problems
- Drug therapy for gastrointestinal system problems
- Drug therapy for nervous system problems
- Drug therapy for problems of the musculoskeletal system

Students in all sections of this course will be required to do the following:

1. Complete required reading and posted assignments on Canvas prior to the start of the scheduled class or lab.
2. Attend and participate in all classroom, simulation, and lab learning activities.
3. Comply with all rules and regulations as outlined in the current Vocational Nursing Student Handbook, Panola College Catalog and Pathfinder.

4. In the event of an emergency or announced campus closure due to a natural disaster or pandemic and instruction changes to follow alternate operations, students may be required to join and participate in ZOOM classes at scheduled class time for the semester. Students will complete and submit all online assignments as instructed through the Canvas course.

Methods of Instruction/Course Format/Delivery:

The course offered includes face to face class, simulation and learning labs. Methods of instruction include class discussion, internet resources, computer assistive instruction, independent study, case studies, videos, lecture, group assignments, role play, quizzes, library and internet research, study guides, written assignments, and exams.

Major Assignments/Assessments:

The following items will be assigned and assessed during the semester and used to calculate the student's final grade.

Assignments/Quizzes

Weekly assignment will be posted on Canvas and must be completed and submitted by the posted due dates. Assignments can include quizzes, discussions, computer assisted instruction assignments, study guides, case studies, patient reviews, NCLEX question assignments (10% of final grade)

Assessments: (All exams will be administered through Exemplify) (90%)

- Exam I
- Exam II
- Exam III
- Exam IV
- Exam V
- Exam VI
- Exam VIII
- 3 Dosage Calculation Exams
 - Students must earn an 80% or higher on at least one of the 3 exams as a course requirement to pass the course regardless of the overall course average.
- HESI Pharmacology Exam

Course Grade:

The grading scale for this course is as follows:

- 8 content exams (80% of grade of overall course grade)
 - Students must earn an average of 75% on content exams to pass the course regardless of the overall course grade. The HESI specialty exam conversion grade and the dosage calculation exam grades are not included in a student's content exam average but are used as a percentage for the overall course grade.
- Average of dosage calculation exam grade: 5% of the overall course grade
- HESI specialty exam conversion score grade: 10% of overall course grade
- Assignments/Quizzes: 5% of the overall course grade

Objectives that must be met for passing VNSG 1231:

- Overall course grade is equal to or greater than 75%
- 8 Content exam average is equal to or greater than 75%
- One of the three dosage calculation grade must be greater than or equal to 80%

Test Review

1. Students who achieve less than 75% on an exam are encouraged to schedule an appointment with the instructor to review the exam within one week of distribution of scores. **This is a student responsibility.**
2. A student may make an appointment with the instructor to review the exam prior to taking the next scheduled exam.
3. Exam are constructed from a random sample of the material from the course and will be presented in the form of a NCLEX-Style item. Refer to the National Council of State Boards of Nursing, Inc. website ([Next Generation NCLEX](#)) for more information regarding the NCLEX Item Formats.

Texts, Materials, and Supplies:

- *Workman: Understanding Pharmacology Essentials for Medication Safety (3E)*
- *Study Guide Workman: Understanding Pharmacology Essentials for Medication Safety (3E)*
- *Morris: Calculate with Confidence (8E)*
- NCLEX-PN Exam EAQ, 4E, Elsevier
- other materials accessible on the Canvas Course

Required Readings and Recommended Readings:

All required readings and recommended readings will be posted on your CANVAS course each week.

Other:

- Courses conducted via video conferencing may be recorded and shared for instructional purposes by the instructor.
- For current texts and materials, use the following link to access bookstore listings: <https://www.panolacollegestore.com>
- For testing services, use the following link: <https://www.panola.edu/student-services/student-support/academic-testing-center>
- If any student in this class has special classroom or testing needs because of a physical learning or emotional condition, please contact the ADA Student Coordinator in Support Services located in the Charles C. Matthews Student Center or go to <https://www.panola.edu/student-services/student-support/disability-support-services> for more information.
- Panola College welcomes pregnant and parenting students as a part of the student body. This institution is committed to providing support and adaptations for a successful educational experience for pregnant and parenting students. Students experiencing a need for accommodations related to pregnancy or parenting will find a Pregnancy and Parenting Accommodations Request form in *The Pathfinder* or may request the form from the course instructor.
- Withdrawing from a course is the student's responsibility. Students who do not attend class and who do not withdraw will receive the grade earned for the course.
- Student Handbook, *The Pathfinder*: <https://www.panola.edu/> (located at the bottom under students)

SCANS CRITERIA

1) **Foundation skills are defined in three areas: basic skills, thinking skills, and personal qualities.**

- a) **Basic Skills:** A worker must read, write, perform arithmetic and mathematical operations, listen, and speak effectively. These skills include:
 - i) Reading: locate, understand, and interpret written information in prose and in documents such as manuals, graphs, and schedules.
 - ii) Writing: communicate thoughts, ideas, information, and messages in writing, and create documents such as letters, directions, manuals, reports, graphs, and flow charts.
 - iii) Arithmetic and Mathematical Operations: perform basic computations and approach practical problems by choosing appropriately from a variety of mathematical techniques.
 - iv) Listening: receive, attend to, interpret, and respond to verbal messages and other cues.
 - v) Speaking: Organize ideas and communicate orally.
- b) **Thinking Skills:** A worker must think creatively, make decisions, solve problems, visualize, know how to learn, and reason effectively. These skills include:
 - i) Creative Thinking: generate new ideas.
 - ii) Decision Making: specify goals and constraints, generate alternatives, consider risks, and evaluate and choose the best alternative.
 - iii) Problem Solving: recognize problems and devise and implement plan of action.
 - iv) Visualize ("Seeing Things in the Mind's Eye"): organize and process symbols, pictures, graphs, objects, and other information.
 - v) Knowing How to Learn: use efficient learning techniques to acquire and apply new knowledge and skills.
 - vi) Reasoning: discover a rule or principle underlying the relationship between two or more objects and apply it when solving a problem.
- c) **Personal Qualities:** A worker must display responsibility, self-esteem, sociability, self-management, integrity, and honesty.
 - i) Responsibility: exert a high level of effort and persevere toward goal attainment.
 - ii) Self-Esteem: believe in one's own self-worth and maintain a positive view of oneself.
 - iii) Sociability: demonstrate understanding, friendliness, adaptability, empathy, and politeness in group settings.
 - iv) Self-Management: assess oneself accurately, set personal goals, monitor progress, and exhibit self-control.
 - v) Integrity and Honesty: choose ethical courses of action.

2) **Workplace competencies are defined in five areas: resources, interpersonal skills, information, systems, and technology.**

- a) **Resources:** A worker must identify, organize, plan, and allocate resources effectively.
 - i) Time: select goal-relevant activities, rank them, allocate time, and prepare and follow schedules.
 - ii) Money: Use or prepare budgets, make forecasts, keep records, and make adjustments to meet objectives.
 - iii) Material and Facilities: Acquire, store, allocate, and use materials or space efficiently. Examples: construct a decision time line chart; use computer software to plan a project; prepare a budget; conduct a cost/benefits analysis; design an RFP process; write a job description; develop a staffing plan.
- b) **Interpersonal Skills:** A worker must work with others effectively.
 - i) Participate as a Member of a Team: contribute to group effort.
 - ii) Teach Others New Skills.
 - iii) Serve Clients/Customers: work to satisfy customer's expectations.

- iv) **Exercise Leadership:** communicate ideas to justify position, persuade and convince others, responsibly challenge existing procedures and policies.
- v) **Negotiate:** work toward agreements involving exchange of resources, resolve divergent interests.
- vi) **Work with Diversity:** work well with men and women from diverse backgrounds.

Examples: collaborate with a group member to solve a problem; work through a group conflict situation, train a colleague; deal with a dissatisfied customer in person; select and use appropriate leadership styles; use effective delegation techniques; conduct an individual or team negotiation; demonstrate an understanding of how people from different cultural backgrounds might behave in various situations.

- c) **Information:** A worker must be able to acquire and use information.

- i) **Acquire and Evaluate Information.**
- ii) **Organize and Maintain Information.**
- iii) **Interpret and Communicate Information.**
- iv) **Use Computers to Process Information.**

Examples: research and collect data from various sources; develop a form to collect data; develop an inventory record-keeping system; produce a report using graphics; make an oral presentation using various media; use on-line computer data bases to research a report; use a computer spreadsheet to develop a budget.

- d) **Systems:** A worker must understand complex interrelationships.

- i) **Understand Systems:** know how social, organizational, and technological systems work and operate effectively with them.
- ii) **Monitor and Correct Performance:** distinguish trends, predict impacts on system operations, diagnose deviations in systems' performance and correct malfunctions.
- iii) **Improve or Design Systems:** suggest modifications to existing systems and develop new or alternative systems to improve performance.

Examples: draw and interpret an organizational chart; develop a monitoring process; choose a situation needing improvement, break it down, examine it, propose an improvement, and implement it.

- e) **Technology:** A worker must be able to work with a variety of technologies.

- i) **Select Technology:** choose procedures, tools or equipment including computers and related technologies.
- ii) **Apply Technologies to Task:** understand overall intent and proper procedures for setup and operation of equipment.
- iii) **Maintain and Troubleshoot Equipment:** Prevent, identify, or solve problems with equipment, including computers and other technologies.

Examples: read equipment descriptions and technical specifications to select equipment to meet needs; set up and assemble appropriate equipment from instructions; read and follow directions for troubleshooting and repairing equipment.