Course Syllabus
VNSG 1231-Pharmacology

Revision Date: January 2014

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

Lecture hours = 3, Lab hours = 0
Prerequisites: NURA 1301 or equivalent, BIOL 2404
Semester Credit Hours: 2
Lecture Hours per Week: 3
Lab Hours per Week: 0
Contact Hours per Semester: 48

State Approval Code: 51.3901

Instructional Goals and Purposes: The purpose of this course is students are expected to demonstrate basic competency in reading, writing, oral communication, math, and computer skills. Students are expected to be an active learning participant by assuming accountability in preparing for each class by completing required readings and/or other learning activities as listed in each unit assignment. Proficiency will be measured by examination scores, oral discussions and/or presentations, case studies and internet research activities. Topics include the roles and responsibilities of the nurse in safe administration of medications within a legal/ethical framework.

Learning Outcomes:
1. Identify properties, effects, and principles of pharmacotherapeutic agents
2. List common 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:

MEMBER OF THE PROFESSION

<table>
<thead>
<tr>
<th>1. Function within the nurse’s legal scope of practice and in accordance with the policy and procedures to prepare and administer pharmacotherapeutic agents responsibly.</th>
<th>DEC #1:A,B,C,D PO 1,2</th>
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<tbody>
<tr>
<td>(SCANS IA i,ii,iii,iv,v)</td>
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**PROVIDER OF PATIENT-CENTERED CARE:**

<table>
<thead>
<tr>
<th></th>
<th>Statement</th>
<th>DEC #2:A,B,C,D,E,F,G,H PO</th>
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<tbody>
<tr>
<td>2</td>
<td>Use clinical reasoning and evidence-based policies as the basis for decision making in preparing and administering pharmcotherapeutic agents. (SCANS IA i,ii,iii,iv,v)</td>
<td>3</td>
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<tr>
<td>3</td>
<td>Identify and report data to prioritize and provide care following the administration of pharmcotherapeutic agents and list potential outcomes. (SCANS IA i,ii,iii,iv,v)</td>
<td>4,5</td>
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<tr>
<td>4</td>
<td>Assist in determining the physical and mental health status, needs, and preferences of culturally, ethnically, and socially diverse patients and their families based on assessment and interpretation of health-related data. (SCANS IA i,ii,iii,iv,v)</td>
<td>3,4,5</td>
</tr>
<tr>
<td>5</td>
<td>Identify appropriate care, teaching, and reportable alterations following administration of pharmcotherapeutic agents. (SCANS IA i,ii,iii,iv,v)</td>
<td>6</td>
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<tr>
<td>6</td>
<td>Discuss the major therapeutic actions, common side effects, contraindications and nursing interventions for drug categories. (SCANS IA i,ii,iii,iv,v)</td>
<td>3,4,5,6,7</td>
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<tr>
<td>7</td>
<td>Provide safe, caring nursing environment for assigned patients with predictable health care needs when administering medications through a supervised, directed scope of practice. (SCANS IA i,ii,iii,iv,v)</td>
<td>4,5,6,7</td>
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**PATIENT SAFETY ADVOCATE:**

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<thead>
<tr>
<th></th>
<th>Statement</th>
<th>DEC #3:A,B,C,D,E,F PO</th>
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<tbody>
<tr>
<td>8</td>
<td>Implement measures to promote quality and a safe environment for patients, self, and others when preparing and administering medications. (SCANS IA i,ii,iii,iv,v)</td>
<td>8,9</td>
</tr>
<tr>
<td>9</td>
<td>Consider patient safety, and needed instruction, training and supervision when needed when preparing and administering medications. (SCANS IA i,ii,iii,iv,v)</td>
<td>8,9</td>
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</table>
### MEMBER OF THE HEALTH CARE TEAM:

| 10. Describe communication and collaboration with patients, their families, and the interdisciplinary health care team to assist in the planning, delivery, patient-centered care when administering medications. (SCANS IA i,ii,iii,iv,v) | DEC #4:A,B,C,D,E,F,G PO 10,11 |
| 11. Analyze and identify patient needs in medication administration to ensure continuity of care. (SCANS IA i,ii,iii,iv,v) | DEC #4:A,B,C,D,E,F,G PO 10,11,12 |
| 12. Describe how to document data using technology. (SCANS IA i,ii,iii,iv,v) | DEC #4:A,B,C,D,E,F,G PO 13 |

### Course Content:

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

| a. Discuss therapeutic action, side effects, contraindications, and apply the nursing process for the following drug categories. | CO: 2,3,5,6,7,8,9,11 |
| b. Demonstrate the use of evidence based practice clinical reasoning when preparing and administering the following drug categories. | CO: 1,2,5,7,8,9, |
| c. Determine cultural, social, and ethical diversity when considering the administration of the following drug categories. | CO: 2,3,4,5,11 |
| d. Demonstrate prioritization of care based on therapeutic outcomes of the administration of the following drug categories. | CO: 1,2,6,7,8,9,11 |
| e. Implement measures to promote patient safety when administering the following drug categories. | CO: 1,2,7,8,9, |
| f. Demonstrate appropriate patient and family teaching prior to administration of the following drug categories. | CO: 4,5,6,9,10,11 |
| g. Demonstrate appropriate documentation and follow up assessment with the administration of the following | CO: 1,3,8,10,12 |
Drug Categories presented in this course:

1. Drugs for pain, sleep, anti-inflammatory
2. Drugs for seizures
3. Drugs for asthma and respiratory problems
4. Drugs for depression, anxiety and psychosis
5. Drugs for Parkinson’s and dementia
6. Drugs for Eye problems
7. Drugs for nausea, vomiting, diarrhea, constipation and gastric problems
8. Drugs for endocrine problems
9. Drugs for diabetes
10. Drugs affecting urine output
11. Drugs for hypertension
12. Drugs for heart failures
13. Drugs for heart rhythm problems
14. Drugs for hyperlipidemia
15. Drugs that affect blood clotting
16. Antibacterial drugs
17. Antiviral Drugs
18. Antitubercular and antifungal drugs
19. Drugs for cancer therapy

Methods of Instruction/Course Format/Delivery:

<table>
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<tr>
<th>Audio-Visual</th>
<th>On line Participation</th>
<th>Lecture Notes</th>
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<tr>
<td>Student/Teacher Conference</td>
<td>Independent Study</td>
<td>Pre-exam quizzes</td>
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<tr>
<td>In Class Participation</td>
<td>Workbook</td>
<td>Case Studies</td>
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<tr>
<td>Study Guides</td>
<td>VCE</td>
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Course Requirements:

1. The student must have an average grade of 75 or above in order to successfully complete this course.
2. Preparation and active participation in class.
3. Outside individualized research in texts, videos, CAIs and journals.
4. Compliance with all rules and regulation as outlined in the current Department of Nursing Student Handbook and Panola College catalog.

Canvas:
Canvas may be used to supplement the course. You will be expected to check your email, reply to messages, and complete assignments on Canvas as instructed. As you know, there is not enough time to review all the content in the book. Therefore, you will be responsible for reviewing and studying selected chapters independently.

Course Grade:
The grading scale for this course is as follows:

The VN Nursing Program, in accordance with policy, uses the following numerical scale in computing test scores and written work:

A = 90-100
B = 80-89.99
C = 75-79.99
F = 74.99 and below

NO ROUNDING

Overall Course Grade
Test 90%
Quizzes/Discussions/CAI’s/Study Guides 10%

Exam I
Exam II
Exam III
Exam IV
Exam V
Exam VI
Exam VII
Exam VIII
Exam IX
Exam X
3 Calculations Exams

Test average must be 75 or greater to pass the course.

Test Review
1. Pre-Test Review will be conducted at the discretion of the instructor.
2. Students who achieve less than 75% on an exam must schedule an appointment with the instructor to review the exam within one week of distribution of scores. This is a student responsibility.
3. A student may make an appointment with the instructor to review the test.
4. If you challenge a test question, you must submit in writing a rationale and reference regarding the question.

Texts, Materials, and Supplies:
- *Understanding Pharmacology Essentials for Medication Safety*
- *Calculate with Confidence*
- other materials

Other:
- For current texts and materials, use the following link to access bookstore listings: [http://www.panolacollegestore.com](http://www.panolacollegestore.com)
- For testing services, use the following link: [http://www.panola.edu/elearning/testing.html](http://www.panola.edu/elearning/testing.html)
- 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 Administration Building or go to [http://www.panola.edu/student-success/disability-support-services/](http://www.panola.edu/student-success/disability-support-services/) for more information.
- 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.
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/Customer: 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.