

**CLARENDON COLLEGE
VOCATIONAL NURSING
VNSG 1231 Pharmacology
Spring 2012**

**CLARENDON COLLEGE
Division of Workforce**

Course Name: VNSG 1231 Pharmacology

Credit Hours: 2

Semester: Spring 2012

Contact Hours: 32

Classroom Location/ Office location	Clarendon: 313 Kearney, Clarendon, Texas 79226
	Pampa: 1601 W. Kentucky, Pampa, 79065
	Childress: 1902 Ave G NW, Childress, TX 79201

Instructor: Kory Dunn, RN

E-mail: kory.dunn@clarendoncollege.edu

Phone: Pampa Campus: (806) 665-8801 ext. 2039;
Clarendon Campus (806) 874-3571 ext. 157;
Childress Campus: (940) 937-2001

Office Hours: As posted or by appointment

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

End-of-Course Outcomes: (WECM)

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

Course Outcomes: (DEC)

The DEC competencies are fully integrated throughout the curriculum for the VN student. The DEC relates to the entry level skills each student will acquire as they relate to the working world and the competencies required by the Texas Board of Nursing.

Learning Outcomes: (DEC)

A. Member of Profession

The student will:

1. Discuss OSHA standards and protocols

B. Provider of Patient Centered-Care

The student will:

1. Using concepts from basic science, identify how pharmacotherapeutic agents work in the body
2. Identify medical abbreviations associated with medication administration
3. Discuss properties, effects, and basic principles underlying the use and administration of pharmacotherapeutic agents
4. Identify the effects of misuse of prescription and nonprescription medications and other substances
5. Describe the major classifications of pharmacotherapeutic agents

C. Patient Safety Advocate

The student will:

1. Describe the process for clarifying orders or treatment regimens that may be inaccurate, non-efficacious, contraindicated, or otherwise harmful to the patient
2. Use standardized reports for documenting and reporting reactions and untoward effects to medications clearly and accurately communicate the same to other healthcare professionals

D. Member of the Healthcare Team

The student will:

1. Identify and discuss the role of the medication assistant, nurse, and other healthcare team members in medication administration
2. Discuss issues in current pharmacological treatment modalities
3. Discuss accountability of the vocational nurse in medication administration
4. Examine the cost of pharmacological healthcare regimens
5. Demonstrates knowledge of reliable online sites for quality healthcare data
6. Identify principles of intrapersonal conflict management, problem solving, data collection, and basic time management skills
7. Identify issues in current pharmacological treatment modalities including costs
8. Participate in discharge teaching relating to medication administration and dosage regime in lab exercises and simulation

E. Essential Competencies

The student will:

1. Solve problems and build employability skills such as positive attitude, critical thinking skills, work ethic and teamwork
2. Exhibit a positive attitude in participating in class activities or in patient care activities on time, safely, and correctly
3. Use critical thinking skills to identify methods, requirements, and standards to enhance patient care and healthcare delivery
4. Participate in teamwork activities that foster a positive learning environment in the classroom and/or clinical that promote health restoration through nursing care and teaching
5. Demonstrate positive work ethics through application of values and morals consistent with the nursing profession in all activities of the nursing program
6. Explore changes in health care impacting individual, community, and organizational related to economic, regulatory, and governmental trend

SCANS COMPETENCIES

The individual SCANS Foundation Skills and competencies have been identified and are located on file in the nursing office. Demonstration of SCANS is documented by the student's ability to provide evidence that the skill has been mastered.

Statement of Purpose

VNSG 1231 Pharmacology partially satisfies the requirement for the vocational nursing certificate at Clarendon College.

Required Instructional Materials:

Textbook:

Workman, M. L., LaCharity, L., & Kruchko S. C., with Ponto, J. (2011). *Understanding pharmacology: Essentials of medication safety*. St. Louis, MO: Saunders-Elsevier.

Other Relevant Materials:

Nurses Drug Handbook, two folders, pens (Red and blue/black), highlighter, paper.

Student Requirements: The student shall:

Demonstrate accurate dosage calculation;
Identify the principles of medication administration safety; and
Outline the elements of accurate documentation of medication administration.

Methods of Instruction:

Lectures	required reading	written assignments
quizzes	classroom discussions	small group work
audio-visual aids	demonstrations	return demonstrations

Grading Policies:

Major Exams	50%
Final Exam	20%
Quizzes	15%
End of Course Exam	10%
Daily Assignments	5%

GRADING SCALE:**A = 94 – 100****B = 86 – 93****C = 78 – 85****D = 68 – 77****F = Below 68**

Beginning with the 5th major exam in all nursing courses, students' must achieve a major exam grade average of 78. The average of 78 must be maintained throughout the remainder of the course. If at any time the students' major exam grade average drops below 78, the student is required to immediately withdraw from all nursing courses and will not continue in the program. Please note this average is strictly a major exam grade average and daily grades, etc. will not be included. *Students must achieve a grade of 78 to pass all courses in the vocational nursing program.*

****NOTE: GRADES WILL NOT BE ROUNDED.** (Example: A grade of 77.5 to 77.99 will *not* be considered as passing).

No late work will be accepted!!

Exams will be given on designated days. Make up exams may be given at the discretion of the instructor.

A student's final grade will be made available through Campus Connect at Clarendon College's website.

Classroom Conduct

Failure to comply with lawful direction of a classroom instructor is a disruption for all students enrolled in the class.

Cheating violations include, but are not limited to: (1) obtaining an examination, classroom activity, or laboratory exercise by stealing or collusion; (2) discovering the content of an examination, classroom activity, laboratory exercise, or homework assignment before it is given; (3) using an unauthorized source of information during an examination, classroom activity, laboratory exercise, or homework assignment; (4) entering an office or building to obtain unfair advantage; (5) taking an examination for another person; (6) completing a

classroom activity, laboratory exercise, homework assignment, or research paper for another person; (7) altering grade records; (8) using any unauthorized form of electronic communication device during an examination, classroom activity, or laboratory exercise; (9) Plagiarism.

Plagiarism is the using, stating, offering, or reporting as one's own, an idea, expression, or production of another person without proper credit; (10) Students are required to dress in a manner as deemed appropriate for the classroom setting and should not disrupt the learning process.

Disciplinary actions for cheating or plagiarism in any course are at the discretion of the individual instructor. The instructor of that course will file a report with the Director of Nursing and/or the Dean of Students when a student is caught cheating or for plagiarism in the course, whether it be a workforce or academic course. The report shall include the course, instructor, student's name, and the type of cheating involved. Students who are reported for cheating or plagiarism to the Director of Nursing and the Dean of Students more than once shall be disciplined by the Dean. The Dean will notify all involved parties within fourteen days of any action taken.

American with Disabilities Act Statement:

Clarendon College provides reasonable accommodations for persons with temporary or permanent disabilities. Should you require special accommodations, notify the Office of Student Services (806-874-3571 or 800-687- 9737). We will work with you to make whatever accommodations we need to make.

Withdrawal: If a student decides that they are unable to complete this course or that it will be impossible to complete the course with a passing grade, you may drop the course and receive a "W" on your transcript. Withdrawal from a course is a formal procedure that must be initiated by the student. If the student does not go through the formal withdrawal procedure, the student will receive a grade of "F" on their transcript. A student is permitted to drop a course if he/she obtains an official withdrawal form from the Director of Nursing before the 12th class day.

Attendance, Cell Phone Policy, Classroom Etiquette, and Academic Honesty: See Vocational Nursing Handbook for policies.

Pharmacology

Course Outline: As situations arise, modifications may have to be made to this schedule. Every attempt will be made to keep changes to a minimum. Each week assignments may include required reading, written assignments, quizzes, and return demonstrations.

Content	Learning Activities	Behavioral Outcomes
Chapter 1 –The Nursing Process	Reading assignments, written assignments, lab work, quizzes.	<ol style="list-style-type: none">1. Describe the five steps of the nursing process.2. Discuss how the nursing process is used in administering medications.3. Explain subjective and objective data, specific nursing activities related to assessing, diagnosing, planning, implementing, and evaluating the patient's response to medications.
Chapter 2 – Patient Teaching and Health Literacy	Reading assignments, written assignments, lab work, quizzes	<ol style="list-style-type: none">1. Relate some of the problems that patients have when they cannot read or understand health instructions.2. Describe common causes of patient medication errors.3. Explain the process of teaching patients about medications.
Chapter 3 – Legal Aspects Affecting the Administration of Medications	Reading assignments, written assignments, lab work, quizzes	<ol style="list-style-type: none">1. Relate the names of major federal laws about drugs and drug use.2. Explain what is meant by “scheduled drugs” or “controlled substances” and give examples of drugs in the different schedules.3. Discuss how the nurse is responsible for controlled substances.4. Describe the information included in a medication order or prescription.5. Define and give examples of the four different types of medication orders.6. Describe the differences between authority, responsibility, and accountability.7. Explain the necessary steps if a medication error is made.

Chapter 4 – Foundations and Principles of Pharmacology	Reading assignments, written assignments, lab work, quizzes	<ol style="list-style-type: none"> 1. Define and discuss the key words used in pharmacology and about giving drugs. 2. Explain the differences between the chemical, generic, official, and brand names of medications. 3. Describe the four basic physiologic processes that affect medications in the body. 4. Recognize and discuss the types of drug actions. 5. Differentiate the differences between side effects and adverse effects.
Chapter 5 – Lifespan and Cultural Modifications	Reading assignments, written assignments, lab work, quizzes	<ol style="list-style-type: none"> 1. Explain the specific considerations in giving medications to pediatric, pregnant, breastfeeding, or elderly patients. 2. Relate special considerations that should be taken in providing care to individuals from different cultures. 3. Describe specific nursing behaviors that assist in helping patients succeed with their medication plans.
Chapter 6 – Self Care: Over-The-Counter Products, Herbal Therapies, and Drugs for Health Promotion	Reading assignments, written assignments, lab work, quizzes	<ol style="list-style-type: none"> 1. Analyze advantages and disadvantages of over-the-counter medications. 2. Describe some of the precautions to think about in taking herbals or other alternative or complimentary therapies. 3. Explain common agents taken for health promotion.
Chapter 11 – Allergy and Respiratory Medications	Reading assignments, written assignments lab work, quizzes	<ol style="list-style-type: none"> 1. Recognize and discuss major antihistamines used to treat breathing problems. 2. Describe the action of antitussive medications. 3. Relate medications used to treat and prevent asthma attacks. 4. Describe the major actions and adverse reactions of the two main categories of bronchodilators. 5. Describe at least 6 major medications commonly used as decongestants. 6. Define the mechanism of action for expectorants. 7. Explain the major contraindications to the use of nasal steroids.

Chapter 12 – Anti-infective Medications	Reading assignments, written assignments, lab work, quizzes	<ol style="list-style-type: none"> 1. Describe the major anti-infective drug categories and the organisms against which they are effective. 2. Define “spectrum” and explain what this word means in anti-infective therapy. 3. Explain some of the most common adverse reactions to medications used to treat infections. 4. Outline the most important things to teach the patient who is taking anti-infective medications.
Chapter 13 – Antivirals, Antiretrovirals, and Antifungal Medications	Reading assignments, written assignments, lab work, quizzes	<ol style="list-style-type: none"> 1. Describe how antiviral and antiretroviral medications work. 2. Define common medications used in treating AIDS and AIDS-related fungal infections. 3. Outline Standard Precautions the nurse takes in limiting exposure to AIDS.
Chapter 14 - Antineoplastic Medications	Reading assignments, written assignments, lab work, quizzes	<ol style="list-style-type: none"> 1. Discuss the types of drugs used to treat neoplastic disease or cancer. 2. Explain the major adverse reactions associated with antineoplastic agents. 3. Develop a teaching plan for a patient taking an antineoplastic drug.
Chapter 15 - Cardiovascular and Renal Medications	Reading assignments, written assignments, lab work, quizzes	<ol style="list-style-type: none"> 1. Explain the approved way to give different forms of antianginal therapy. 2. Discuss the uses and general actions of cardiac drugs used to treat dysrhythmias. 3. Describe the common treatment for various types of lipoprotein disorders. 4. Explain the actions of different categories of drugs used to treat hypertension. 5. Relate the general uses and actions of cardiotoxic drugs. 6. Relate indications for electrolyte replacement.
Chapter 16 - Central and Peripheral Nervous System Medications	Reading assignments, written assignments, lab work, quizzes	<ol style="list-style-type: none"> 1. Discuss the major classifications of drugs that affect the CNS. 2. Explain the major actions of drugs used to treat disorders of the CNS. 3. Relate different actions of antimigraine products. 4. Describe the role of psychotropic drugs in psychotherapeutic intervention.

		<ol style="list-style-type: none"> 5. Compare and contrast different categories of medications used to treat depression.
Chapter 17 – Medications for Pain Management	Reading assignments, written assignments, lab work, quizzes	<ol style="list-style-type: none"> 1. Discuss medications commonly used for the treatment of moderate to severe pain. 2. Evaluate different forms of narcotic agonists and narcotic agonist-antagonists in their ability to control pain. 3. Explain why there are so many rules about how narcotics and analgesic drugs may be given. 4. Compare and contrast drug tolerance and drug addiction. 5. Describe behaviors that would make you believe a patient is addicted to the drug.
Chapter 18 – Gastrointestinal Medications	Reading assignments, written assignments, lab work, quizzes	<ol style="list-style-type: none"> 1. Discuss common uses for antacids and histamine H2-receptor antagonists. 2. Compare and contrast actions of anticholinergic and antispasmodic medications on the GI tract. 3. Compare the actions and adverse reactions of the five major classifications of laxatives. 4. Explain indications for the use of at least two common antidiarrheals, antiflatulents, digestive enzymes, and emetics. 5. Describe indications for disulfiram use and what is meant by “disulfiram reaction”.
Chapter 19 – Hematologic Products	Reading assignments, written assignments, lab work, quizzes	<ol style="list-style-type: none"> 1. Discuss drugs that act in the formation, repair or function of red blood cells. 2. Describe the influence of anticoagulants on blood clotting. 3. Explain at least three adverse reactions associated with hematologic products. 4. Develop a teaching plan for patients taking anticoagulants on a long term basis.
Chapter 20 – Hormones and Steroids	Reading assignments, written assignments, lab work, quizzes	<ol style="list-style-type: none"> 1. Describe the use of antidiabetic medications. 2. Discuss preparations that act on the uterus. 3. Compare and contrast the action of adrenal and pituitary hormones. 4. Describe at least five adverse reactions that may result from the use of glucocorticoids and mineralcorticoids. 5. Compare the actions of various male and female

		<p>hormones.</p> <p>6. Explain the indications for the use of thyroid preparations.</p>
Chapter 21 – Immunologic Medications	Reading assignments, written assignments, lab work, quizzes	<ol style="list-style-type: none"> 1. Define common terms used in immunology. 2. Explain the difference between the three different types of immunity. 3. Outline typical immunization plans for children and adults. 4. Discuss the major adverse medications of common immunologic drugs. 5. Identify at least three drugs used for in vivo testing.
Chapter 22 – Anti-inflammatory, Musculoskeletal, and Anti arthritis Medications	Reading assignments, written assignments, lab work, quizzes	<ol style="list-style-type: none"> 1. Discuss medications commonly used for the treatment of minor musculoskeletal pain and inflammation. 2. Explain the appropriate use for musculoskeletal relaxants. 3. Define the mechanisms of action of the different antiarthritis medications. 4. Describe the clinical situations in which uricosuric therapy may be indicated. 5. Compare the actions of various anti-inflammatory and muscle relaxant agents. 6. Describe adverse reactions frequently found in the use of antiarthritis medications.
Chapter 23 – Topical Preparations	Reading assignments, written assignments, lab work, quizzes	<ol style="list-style-type: none"> 1. Explain major categories of medications used topically. 2. Discuss at least three preparations used to treat eye, ear, and skin problems. 3. Describe specific administration techniques for topical products.
Chapter 24 – Vitamins and Minerals	Reading assignments, written assignments, lab work, quizzes	<ol style="list-style-type: none"> 1. Explain actions and indications for vitamins and minerals. 2. Discuss at least 6 products used to treat vitamin or mineral deficiencies. 3. Present a teaching plan for patients who require vitamin or mineral supplements.

Chapter 22 – Anti-inflammatory, Musculoskeletal, and Anti arthritis Medications	Reading assignments, written assignments, lab work, quizzes	<ol style="list-style-type: none"> 7. Discuss medications commonly used for the treatment of minor musculoskeletal pain and inflammation. 8. Explain the appropriate use for musculoskeletal relaxants. 9. Define the mechanisms of action of the different antiarthritis medications. 10. Describe the clinical situations in which uricosuric therapy may be indicated. 11. Compare the actions of various anti-inflammatory and muscle relaxant agents. 12. Describe adverse reactions frequently found in the use of antiarthritis medications.
Chapter 23 – Topical Preparations	Reading assignments, written assignments, lab work, quizzes	<ol style="list-style-type: none"> 4. Explain major categories of medications used topically. 5. Discuss at least three preparations used to treat eye, ear, and skin problems. 6. Describe specific administration techniques for topical products.
Chapter 24 – Vitamins and Minerals	Reading assignments, written assignments, lab work, quizzes	<ol style="list-style-type: none"> 4. Explain actions and indications for vitamins and minerals. 5. Discuss at least 6 products used to treat vitamin or mineral deficiencies. 6. Present a teaching plan for patients who require vitamin or mineral supplements.