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<b>COURSE PREFIX/NO:</b>	<b>NUR 106/LANU 106</b>
<b>COURSE TITLE:</b>	<b>PHARMACOLOGIC BASICS</b>
<b>LECTURE HOUR/WEEK</b>	<b>2.0</b>
<b>LAB HOURS/WEEK</b>	<b>0.0</b>
<b>CREDIT HOURS/SEMESTER</b>	<b>2.0</b>

[Distance Learning Attendance/VA Statement](#)

[Textbook Information](#)

### **COURSE DESCRIPTION**

This introductory course outlines the basic concepts of pharmaceuticals, pharmacokinetics, pharmacodynamics and pharmacotherapeutics. The process of clinical calculations is introduced as well as the major drug classifications.

### **STUDENT LEARNING OUTCOMES**

The student will be able to administer medications safely for clients across the lifespan with various health problems. They will accurately calculate drug dosages and discuss pharmacology as it relates to nursing and the different disease processes. The student will be able to discuss drug action and the principles of drug administration.

The student will function in the roles of provider of care, manager of care and member within the discipline of nursing by the completion of NUR 106/LANU 106 and will:

#### **Module 1: Drug Calculations Using Dimensional Analysis**

1. Utilize principles that promote accurate calculation of units of measure within the metric system.
2. Utilize principles that promote safe dosage calculations using dimensional analysis.
3. Identify legal and ethical parameters related to drug dosage calculations.
4. Identify measures to prevent medication errors for clients across the lifespan.

#### **Module 2: Introduction to Pharmacology, Principles of Drug Administration, The Drug Approval Process, Pediatric & Geriatric Pharmacology, Vaccines, Antibacterials, Drugs for Gastrointestinal Disorders, Antiulcer Drugs, Anticancer Drugs, and Biologic Response Modifiers.**

1. Identify the principles of pharmacology and medication administration for clients across the lifespan.
2. Identify legal and ethical principles related to the administration of vaccines, selected antibacterial, gastrointestinal, and anticancer drugs, and biologic response modifiers across the lifespan.
3. Identify subjective and objective data pertinent to medication therapy according to the functional health patterns.
4. Identify cultural considerations in the administration of selected antibacterial, gastrointestinal and anticancer drugs, and biologic response modifiers across the lifespan.

5. Identify the actions, uses, side effects, and adverse effects of vaccines, selected antibacterial, gastrointestinal, and anticancer drugs, and biologic response modifiers across the lifespan.
6. Identify critical safety issues and nursing interventions related to the administration of vaccines, selected antibacterial, gastrointestinal, and anticancer drugs, and biologic response modifiers across the lifespan.
7. Identify critical thinking strategies related to the administration of vaccines, selected antibacterial, gastrointestinal, and anticancer drugs, and biologic response modifiers across the lifespan.
8. Apply the nursing process for the selection, administration, and evaluation of vaccines, selected antibacterial, gastrointestinal, and anticancer drugs, and biologic response modifiers.
9. Identify measures to prevent medication errors in clients across the lifespan.

**Module 3: Sulfonamides; Drugs for Urinary Tract Disorders; Antidiabetic Drugs; Cardiovascular Agents – Cardiac Glycosides, Antianginals, Antidysrhythmics, Diuretics & Antihypertensive Drugs; Basic and Advanced Intravenous Calculations**

1. Identify the principles of pharmacology and medication administration for clients across the lifespan.
2. Identify legal and ethical principles related to the administration of sulfonamides; drugs for urinary tract disorders; antidiabetic drugs; and selected cardiovascular agents across the lifespan.
3. Identify subjective and objective data pertinent to medication therapy according to the functional health patterns.
4. Identify cultural considerations in the administration of sulfonamides; drugs for urinary tract disorders; antidiabetic drugs; and selected cardiovascular agents across the lifespan.
5. Identify the actions, uses, side effects, and adverse effects of sulfonamides; drugs for urinary tract disorders; antidiabetic drugs; and selected cardiovascular agents across the lifespan.
6. Identify critical safety issues and nursing interventions related to the administration of sulfonamides; drugs for urinary tract disorders; antidiabetic drugs; and selected cardiovascular agents across the lifespan.
7. Identify critical thinking strategies related to the administration of sulfonamides; drugs for urinary tract disorders; antidiabetic drugs; and selected cardiovascular agents across the lifespan.
8. Apply the nursing process for the selection, administration, and evaluation of sulfonamides; drugs for urinary tract disorders; antidiabetic drugs; and selected cardiovascular agents.
9. Identify measures to prevent medication errors in clients across the lifespan.

**Module 4: Drugs for Common Upper Respiratory Disorders; Drugs for Common Lower Respiratory Disorders; Macrolides, Tetracyclines, Aminoglycosides, and Fluoroquinolones; Cardiovascular Agents – Anticoagulants, Antiplatelets, Thrombolytics; Antilipidemics and Peripheral Vasodilators; Antituberculars; Antivirals; Nonopioid and Opioid Analgesics**

1. Identify the principles of pharmacology and medication administration for clients across the lifespan.
2. Identify legal and ethical principles related to the administration of drugs for common upper and lower respiratory disorders; selected antibacterials; selected cardiovascular agents;

antilipidemics and peripheral vasodilators; antituberculars; antivirals; and selected analgesics across the lifespan.

3. Identify subjective and objective data pertinent to medication therapy according to the functional health patterns.
4. Identify cultural considerations in the administration of drugs for common upper and lower respiratory disorders; selected antibacterials; selected cardiovascular agents; antilipidemics and peripheral vasodilators; antituberculars; antivirals; and selected analgesics across the lifespan.
5. Identify the actions, uses, side effects, and adverse effects of drugs for common upper and lower respiratory disorders; selected antibacterials; selected cardiovascular agents; antilipidemics and peripheral vasodilators; antituberculars; antivirals; and selected analgesics across the lifespan.
6. Identify critical patient safety issues and nursing interventions related to the administration of drugs for common upper and lower respiratory disorders; selected antibacterials; selected cardiovascular agents; antilipidemics and peripheral vasodilators; antituberculars; antivirals; and selected analgesics across the lifespan.
7. Identify critical thinking strategies related to the administration of drugs for common upper and lower respiratory disorders; selected antibacterials; selected cardiovascular agents; antilipidemics and peripheral vasodilators; antituberculars; antivirals; and selected analgesics across the lifespan.
8. Apply the nursing process for the selection, administration, and evaluation of drugs for common upper and lower respiratory disorders; selected antibacterials; selected cardiovascular agents; antilipidemics and peripheral vasodilators; antituberculars; antivirals; and selected analgesics
9. Identify measures to prevent medication errors in clients across the lifespan.

### **Module 5: Antipsychotics and Anxiolytics; Antidepressants and Mood Stabilizers**

1. Identify the principles of pharmacology and medication administration for clients across the lifespan.
2. Identify legal and ethical principles related to the administration of antipsychotics and anxiolytics; antidepressants and mood stabilizers across the lifespan.
3. Identify subjective and objective data pertinent to medication therapy according to the functional health patterns.
4. Identify cultural considerations in the administration of antipsychotics and anxiolytics; antidepressants and mood stabilizers across the lifespan.
5. Identify the actions, uses, side effects, and adverse effects of antipsychotics and anxiolytics; antidepressants and mood stabilizers across the lifespan.
6. Identify critical safety issues and nursing interventions related to the administration of antipsychotics and anxiolytics; antidepressants and mood stabilizers across the lifespan.
7. Identify critical thinking strategies related to the administration of antipsychotics and anxiolytics; antidepressants and mood stabilizers across the lifespan.
8. Apply the nursing process for the selection, administration, and evaluation of antipsychotics and anxiolytics; antidepressants and mood stabilizers.
9. Identify measures to prevent medication errors in clients across the lifespan.

### **METHODS OF INSTRUCTION**

A variety of teaching methods may include CD instruction, learning management system, assigned reading, audiovisuals and computer lab experience, handouts, written assignments, discussion, clinical client care experiences and observations, clinical group conferences, individual conferences, study guides/learning exercises.

Students are required to access the learning management system enhanced class throughout the semester and are responsible for all information posted.

### **LEARNING RESOURCES COMPONENT**

As a future member within the discipline of nursing, the student is expected to assume responsibility for learning. Faculty encourage and expect students to utilize critical thinking resources that will help develop this attribute. Pertinent resources could include nursing journals, on-line resources, selected videos, and supplemental texts.

All work submitted electronically must be saved and sent in Microsoft Word or in rich text format.

### **COMPUTER REQUIREMENTS**

Content for NUR 106 may be delivered online. Students will communicate with the instructors and each other via the learning management system. The student must have Internet Explorer 5.0 or later and a CD ROM with a sound card to be able to use this technology. Appropriate [Netiquette \(Internet Etiquette\)](http://etc.yorktech.com/DistanceLearning/Netiquette/index.html) is required for all communication on the learning management system. Netiquette information is found at <http://etc.yorktech.com/DistanceLearning/Netiquette/index.html>.

### **MINIMAL STANDARDS**

The student will demonstrate student learning outcomes as stated in the syllabus. Student evaluation for the course includes a graded theory component. A student must achieve 80% in the theory component in order to successfully complete the course.

1. Completion of an exam for each of the modules and one comprehensive final examination is required. If an examination is missed it must be made up on the scheduled make-up day. An examination of an alternate format may be provided.
2. Timely attendance and participation in scheduled classroom experiences is mandatory. Students will not be allowed to leave scheduled class early except in emergencies. Students who are tardy for scheduled classes will not be allowed to interrupt class; they may enter the classroom at the first break.
3. Completion of assigned work by designated due dates is required. All assigned written work must be completed using a word processor and must incorporate proper grammar, spelling and sentence structure. Computers are available in labs on both campuses for student use. All word documents are to be saved in rich text format.
4. Students must attend any individual conference scheduled by an instructor.
5. Students will be expected to adhere to institutional nursing program policies.
6. Students are expected to complete all required learning activities prior to the class for which they are assigned and may be asked to present preparation for admission to class.
7. Faculty may institute other testing methods throughout the semester. These may be in the form of pop quizzes or other examinations.
8. Students will be required to access their online Learning Management System (LMS) throughout the semester and will be responsible for all information posted. In order to do this,

students must have access to a computer manufactured no earlier than 2002 with a Windows operating system and access to the internet.

9. Nursing faculty strongly encourage students to spend study time utilizing the resources in the libraries on both campuses to supplement textbook and classroom activities.
10. Failure to comply with any of the above requirements may result in dismissal from the nursing program.

## **EVALUATION STRATEGIES/GRADING**

### ***Theory Component***

Achievement in theory will be measured by exams and a cumulative final exam.

### **DETERMINATION OF GRADE**

A 91 – 100	Average of Exams	80%
B 86 – 90	Cumulative Final	20%
C 80 – 85	Total	100%
D 70 – 79		
F 69 or below		

### **Students must average 80% to successfully complete the course.**

Any student who has an average of 91(A) or above on all exams will qualify to exempt the final exam. In order to qualify for the exemption, all module exams must be taken on the date scheduled. All students have the option to take the final exam. If the final exam is exempted, the exam average will constitute the final exam grade when the course grade is computed. Any student taking make-up exams will not qualify to exempt the final exam regardless of the exam average.

Grades will be rounded to the nearest whole number after final computation of grades. Any student found guilty of cheating or being involved in plagiarism will be given a grade of “0” on an exam or written work and will be subject to further disciplinary action.

**Proctoring Exams:** Students must be in their seats at the designated exam time. Students that are tardy for any exam will not be allowed to enter the exam area and will be required to take the exam on the make-up day.

Students are expected to leave all books, notes, and personal belongings at the front of the room during each exam and exam review. Only pencils will be allowed during the exam. Instructors will circulate within the room while the exam is being taken and reviewed. Only calculators provided by the schools will be allowed for math computations during NUR 106/LANU 106 exams.

**Exam Review Policy:** Exams will be reviewed as scheduled. Students may review each exam at the designated time only. Exam grades will be posted on the online LMS within seven days after the examination has been given. Students may only review their copy of the current exam. Once the next exam has been given the student will not be allowed to review any previous exams. If a student would like to receive test-taking assistance from the Assessment Center, the student may only review the current test.

## **ATTENDANCE**

In order to meet the objectives of this course and to promote professional accountability, the following requirements for attendance will be enforced:

- Students must attend 90% of all class requirements.
- Students who are tardy for scheduled classes will not be allowed to interrupt the class; they may enter the classroom at the first break.

## **ACADEMIC INTEGRITY**

Any student found guilty of cheating, dishonesty, or plagiarism will be given a grade of "0" on an exam or written work and will be subject to further disciplinary action. Plagiarism refers to "The act of appropriating the literary composition of another, on parts or passages of his writings, on the ideas or language of the same, and passing them off as the product of one's own mind." (Black's Law Dictionary, 8<sup>th</sup> edition)

**ENTRY-LEVEL SKILLS:** Admission to the Associate Degree Nursing Program

**PREREQUISITES:** Admission to the Nursing Program; NUR 206/LANU 206

**CO-REQUISITES:** COL 101/LANU elective; BIO 210/BIOL 243, 243L; ENG 101/ENGL 101; NUR 104/LANU 104

**Disabilities Statement:** Any student who feels s/he may need an accommodation based on the impact of a disability should contact the Special Resources Offices (SR) at 803-327-8007 in the 300 area of Student Services. The SRO coordinates reasonable accommodations for students with documented disabilities.

University of South Carolina Lancaster: Students who may need accommodations for a disability should contact Tracey Craig by phone at 803-313-7448 or by email at [tcraig@mailbox.sc.edu](mailto:tcraig@mailbox.sc.edu). Information on Disability Services at USCL may be accessed at <http://usclancaster.sc.edu/academics/Disability.pdf>.