

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

[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 are 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; Sulfonamides; Drugs for Urinary Tract Disorders

1. Identify the principles of pharmacology and medication administration for patients across the lifespan.
2. Identify legal and ethical principles related to the administration of vaccines, selected antibacterial, gastrointestinal, antiulcer, antidiabetics, anticancer drugs as well as selected biologic response modifiers, sulfonamides and drugs used to treat urinary tract disorders.
3. Identify subjective and objective data pertinent to medication therapy according to the functional health patterns.
4. Identify cultural considerations in the administration of vaccines, selected antibacterial, gastrointestinal, antiulcer, antidiabetics, anticancer drugs as well as selected biologic response modifiers, sulfonamides and drugs used to treat urinary tract disorders across the lifespan.
5. Identify the actions, uses, side effects, and adverse effects of vaccines, selected antibacterial, gastrointestinal, antiulcer, antidiabetics, anticancer drugs as well as selected biologic response modifiers, sulfonamides and drugs used to treat urinary tract disorders across the lifespan.
6. Identify critical safety issues and nursing interventions related to the administration of vaccines, selected antibacterial, gastrointestinal, antiulcer, antidiabetics, anticancer drugs as well as selected biologic response modifiers, sulfonamides and drugs used to treat urinary tract disorders across the lifespan.
7. Identify critical thinking strategies related to the administration of vaccines, selected antibacterial, gastrointestinal, antiulcer, antidiabetics, anticancer drugs as well as selected biologic response modifiers, sulfonamides and drugs used to treat urinary tract disorders across the lifespan.

8. Apply the nursing process for the selection, administration, and evaluation of vaccines, selected antibacterial, gastrointestinal, antiulcer, antidiabetics, anticancer drugs as well as selected biologic response modifiers, sulfonamides and drugs used to treat urinary tract disorders.
9. Identify measures to prevent medication errors in patients across the lifespan.

Module 3: Drugs for Common Upper and Lower Respiratory Disorders; Macrolides, Tetracyclines, Aminoglycosides, Fluoroquinolones; Cardiovascular Agents—Cardiac Glycosides, Antianginals, Antidysrhythmics, Diuretics & Antihypertensive Drugs; Anticoagulants, Antiplatelets, Thrombolytics; Antilipidemics and Peripheral Vasodilators; Antituberculars; Antivirals; Basic and Advanced Intravenous Calculations

1. Identify the principles of pharmacology and medication administration for patients across the lifespan.
2. Identify legal and ethical principles related to the administration of drugs for common upper and lower respiratory disorders; macrolides, tetracyclines, aminoglycosides, fluoroquinolones; and selected cardiovascular disorders.
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; macrolides, tetracyclines, aminoglycosides, fluoroquinolones; and selected cardiovascular disorders across the lifespan.
5. Identify the actions, uses, side effects, and adverse effects of drugs for common upper and lower respiratory disorders; macrolides, tetracyclines, aminoglycosides, fluoroquinolones; and selected cardiovascular disorders across the lifespan.
6. Identify critical safety issues and nursing interventions related to the administration of drugs for common upper and lower respiratory disorders; macrolides, tetracyclines, aminoglycosides, fluoroquinolones; and selected cardiovascular disorders across the lifespan.
7. Identify critical thinking strategies related to the administration of drugs for common upper and lower respiratory disorders; macrolides, tetracyclines, aminoglycosides, fluoroquinolones; and selected cardiovascular disorders across the lifespan.
8. Apply the nursing process for the selection, administration, and evaluation of drugs for common upper and lower respiratory disorders; macrolides, tetracyclines, aminoglycosides, fluoroquinolones; and selected cardiovascular.
9. Utilize principles that promote safe dosage calculations using dimensional analysis when calculating basic and advanced intravenous calculations.
10. Identify measures to prevent medication errors in patients across the lifespan.

Module 4: Nonopioid and Opioid Analgesics; Antipsychotics and Anxiolytics; Antidepressants and Mood Stabilizers

1. Identify the principles of pharmacology and medication administration for patients across the lifespan.
2. Identify legal and ethical principles related to the administration of nonopioid and opioid analgesics; antipsychotics and anxiolytics; and antidepressants and mood stabilizers.
3. Identify subjective and objective data pertinent to medication therapy according to the functional health patterns.
4. Identify cultural considerations in the administration of nonopioid and opioid analgesics; antipsychotics and anxiolytics; and antidepressants and mood stabilizers across the lifespan.
5. Identify the actions, uses, side effects, and adverse effects of nonopioid and opioid analgesics; antipsychotics and anxiolytics; and antidepressants and mood stabilizers across the lifespan.
6. Identify critical safety issues and nursing interventions related to the administration of nonopioid and opioid analgesics; antipsychotics and anxiolytics; and antidepressants and mood stabilizers across the lifespan.
7. Identify critical thinking strategies related to the administration of nonopioid and opioid analgesics; antipsychotics and anxiolytics; and antidepressants and mood stabilizers across the lifespan.

8. Apply the nursing process for the selection, administration, and evaluation nonopioid and opioid analgesics; antipsychotics and anxiolytics; and antidepressants and mood stabilizers across the lifespan.
9. Identify measures to prevent medication errors in patients 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 patient 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 encourages and expects students to utilize critical thinking resources that will help develop this attribute. Pertinent resources could include nursing journals, online 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/LANU 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) is required for all communication on the learning management system. Netiquette information is found at <http://etc.yorktech.com/DistanceLearning/Netiquette/index.html>.

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

MINIMAL STANDARDS

The student demonstrates 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 four module exams is required. The Module Four exam will be a comprehensive exam covering material from Module Four as well as material from the entire course. 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. Students may enter the classroom during the scheduled 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 and sent in Microsoft Word or in rich text format.
4. Students must attend any individual conference scheduled by an instructor.
5. Students will be expected to adhere to institutional policies and policies of the nursing program.

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 required preparation for admission to class.
7. Faculty may institute other testing methods throughout the semester. These may be in the form of pop quizzes, retake exams, or other examinations.
8. Students will be required to access their online learning management system 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 operation system and access to the internet.
9. Nursing faculty strongly encourage students to spend study time utilizing the resources in the Academic Success Center (USCL campus) and Academic Coaching & Tutoring Center (YTC Campus) and 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 module exams.

DETERMINATION OF GRADE

A 91 – 100	Module Exams 1, 2, 3	75%
B 86 – 90	Module Exam 4 (Comprehensive)	<u>25%</u>
C 80 – 85		100%
D 70 – 79		
F 69 or below		

Students must average 80% to successfully complete the course

There will be 4 module exams. The Module 4 exam will be a comprehensive exam covering the assigned material in Module 4 plus all other material covered previously in the course.

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 who are tardy for any exam will be required to take the exam on the make-up exam day.

Students are expected to leave all books, notes and personal belongings at the front of the room during each exam and exam review. During the exam, the desk must be clear of all objects. Only pencils and highlighters will be allowed during the exam. When reviewing the exam, the desk must be clear of all objects, writing or recording instruments are prohibited, and no talking unless directed to the instructor. Instructors will circulate within the room while the exam is being taken and reviewed. Only calculators provided by the schools will be allowed for Drug Dose Competency tests and during other exams requiring the use of a calculator.

Exam Reviews

Exams will be reviewed without any discussion immediately after the exam is given to provide students an opportunity to see the correct answers.

To facilitate student success, a formal exam review will be scheduled and conducted within seven days and will be available to all students that have taken the exam. This exam review will provide answers to the questions, rationales, and allow discussion. The date of all exam reviews will be included on the course calendar.

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 class 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 or involved in plagiarism will be subject to disciplinary action according to the South Carolina Technical Student Code or the USCL Code of Student/Faculty Academic Responsibility. [Student Code and Grievance Procedure](#) (YTC)

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, 9th edition)

ENTRY-LEVEL SKILLS

Admission to the Associate Degree 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

York Technical College: Any student who feels she/he may need an accommodation on the impact of a disability should contact the Special Resources Officers (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. Information on Disability Services at USCL may be accessed at <http://usclancaster.sc.edu/academics/Disability.pdf> .