

**FLORIDA ATLANTIC UNIVERSITY
CHRISTINE E. LYNN COLLEGE OF NURSING
COURSE OVERVIEW
FALL 2014**

COURSE NUMBER: NUR 3145

COURSE TITLE: Pharmacotherapeutics

COURSE FORMAT: Live Class-Blackboard Assisted

CREDIT HOURS: 3 Credits

COURSE SCHEDULE: Mondays 4:00 PM-6:50 PM Room NU 202

PLACEMENT IN CURRICULUM: Required course

PREREQUISITE: Admission to BSN Program

**PREREQUISITE/
COREQUISITE:** NUR 4125

FACULTY: Name and credentials:
Title:
Office Location:
Phone:
E-mail

OFFICE HOURS: Boca Campus NU 337
Mondays 1:00-3:00 PM by appointment
Thursdays 10:00-12:00 AM by appointment

COURSE DESCRIPTION:

The purpose of this course is to examine the effects of pharmacotherapeutic agents used in the treatment of selected illnesses and in the promotion, maintenance and restoration of wellness in diverse individuals across the lifespan. Provides a basic understanding of both therapeutic and adverse reactions to drugs, and predicting potential drug interactions. Personal, genetic, and environmental factors affecting drug therapy are assessed as a foundation for nursing responses. The nurse's role in safe drug administration, assessment of drug effects, and patient education are emphasized. Legal and ethical responsibilities for administering drugs are interpreted.

COURSE OBJECTIVES: Upon completion of NUR 3145, the student will be able to create caring nursing responses in:

Becoming competent

1. Describe the general principles of pharmacotherapeutics, pharmacokinetics, pharmacodynamics, and pharmacogenetics/genomics in wellness promotion and illness prevention and treatment. (PO 2, 3, 5, 8; Essentials III, VI, & VIII).

Becoming compassionate

2. Defend the role of technologies and medication administration systems in creating an environment of quality and safety. (PO 2, 3, 5, 7, 8; Essentials IV, VII).
3. Define polypharmacy and its relevance in managing drug therapy in older adults. (PO 2, 3, 4, 5, 8, 9; Essentials I, III, VII).
4. Evaluate the economic implications of drug therapy on individuals and families. (PO 2, 3, 4, 5, 8, 9, 10; Essentials I, V, VIII).

Demonstrating comportment

5. Discuss legal and ethical parameters of medication administration. (PO 2, 3, 4, 8; Essentials I, V, VIII).
6. Identify the intent, scope, and benefits of drug standards and legislation. (PO 2, 3, 4, 8, 10; Essentials V).

Becoming confident

7. Describe principles of safe administration of medications. (PO 2, 3, 4, 8, 9; Essentials III, V, VII).
8. Describe the effects of health, age, lifestyle, gender, ethnicity and culture on drug therapy. (PO 2, 3, 4, 5, 8, 9; Essentials I, VI, VIII).

Attending to conscience

9. Determine priorities in client education to promote medication adherence and safety. (PO 2, 3, 4, 5, 8, 9; Essentials IV, VI, VIII).
10. Recognize the implications of cultural health beliefs and practices on drug therapy and adherence. (PO 2, 3, 4, 5, 8, 9; Essentials I, VII, VIII).
11. Evaluate the effects of human development, race, gender and, ethnicity on pharmacotherapeutics. (PO 2, 3, 4, 5, 8, 9; Essentials I, VII, VIII).

Affirming commitment

12. Explain strategies for maximizing therapeutic effects of drug therapy and minimizing adverse effects in drug therapy. (PO 2,3, 4, 8; Essentials I, III).

13. Examine drug interactions based on selected drug categories including drug-drug interactions, drug food interactions, drug-ethanol/tobacco interactions and drug-environmental interactions. (PO 2, 3, 4, 6, 8; Essentials I, III).

TEACHING LEARNING METHODS: Face to face lectures, narrated lectures posted on Blackboard, iClicker reviews, nursing situation analysis, review questions, worksheets, quizzes, discussions, Internet sites, and Study Mate Flashcards.

EVALUATION METHODS:

Exams, discussions, case studies, worksheets.

Classroom Participation	25 points
Exam 1	50 points
Exam 2	50 points
Exam 3	50 points
Exam 4	50 points
Comprehensive Final exam	100 points
ATI Exam	TBA

GRADING SCALE:

A grade below 73% is not passing in the undergraduate program.

93-100 = A	77-79 = C+
90-92 = A-	73-76 = C
87-89 = B+	70-72 = C-
83-86 = B	60-69 = D
80-82 = B-	0-59 = F

REQUIRED TEXTS:

1) Lehne, R. (2013). *Pharmacology for nursing care, 8th edition*. St. Louis, Missouri: W.B. Saunders Company. ISBN 9781437735826

2) Davis's Drug Guide for Nurses (most recent edition) hand held device version preferred (Any recent drug reference accepted)

3) RN Pharmacology for Nursing Edition 5.0 –ATI-Nursing Education

3) iClicker-purchase at bookstore

RECOMMENDED RESOURCE:

1) Hand held device (phone or PDA) with Epocrates software.

<http://www.epocrates.com/products/rx/>. The free download is adequate for this course.

BLACKBOARD:

This course will be Web assisted via Blackboard. All of the lecture note handouts and narrated lectures are posted on the course Blackboard site. Students are expected to complete the Learning Modules prior to class. Each Learning Module has a narrated lecture, notes, activities and a quiz. *Be sure to check the announcements frequently.*

COMPUTER REQUIREMENTS:

Operating System: A computer that can run Mac OSX or Win XP or higher

Peripherals: Speakers.

Software: Most recent Java download required to listen to narrated lectures- <http://java.com/en/>

LEARNING MODULES

COURSE DOCUMENTS:

There are lecture note handouts in each of the learning modules. Optional and additional reference documents and selected Web sites will be posted in each of the Learning Modules.

NARRATED LECTURES:

There are narrated Power Point Lectures that should be viewed each week prior to class. The narrated lectures are posted in the Learning Modules. The face-to-face lectures will focus on review of the concepts, clarification, and application of the content.

REVIEW QUESTIONS AND STUDY MATE FLASH CARDS:

Each Learning Module has review questions posted. These critical thinking questions will help you prepare for the quizzes. The review questions are not graded. The review questions have been formatted into the Study Mate Flashcards to help you review the information and test your knowledge. You can easily download the files onto an iPod or review them on your computer. The Study Mate Application from iTunes will also provide access on a portable device.

PHARMACOLOGY DRUG FACT CARDS:

These flashcards from the Evolve Website are organized according to drug classes and are in a PDF document posted in Course Documents on Blackboard. Please print them on card stock paper.

ASSIGNMENTS AND EXAMS

EXAMS:

There are 5 proctored exams for this course. See the course schedule for the dates. The exams will be 50-100 multiple choice questions.

The final is comprehensive. No notes or resources will be allowed during the exams. A non-programmable calculator may be used. Students will have 1- 2 hours to complete the exams. The ATI exam will be calculated into your grade.

REQUIRED READING:

The chapters assigned in the textbooks are required and should be completed for each Learning Module prior to class. An estimated minimum of 9-12 hours of outside preparation will be needed in order to master the course content.

NURSING SITUATIONS:

There are case studies (nursing situations) for some of the units. These will be assigned in some of the units and discussed in class.

QUIZZES:

There will be Blackboard quizzes on each of the drug categories. Each drug category has a folder with learning materials and an assessment that is in the form of a multiple choice quiz. *The quizzes are not graded.* The quizzes are not timed. Go to the Learning Modules tab to find the learning materials and quiz for each drug category.

COURSE POLICIES

ATTENDANCE:

Classroom attendance is required. If you are experiencing major illnesses, absences due to academic duties, or other large-scale issues, contact me immediately to formulate a resolution (if possible).

ASSIGNMENTS:

Assignments and quizzes must be completed by the due dates on the Course Schedule unless arrangements have been made with the instructor in advance.

E-MAIL:

Students are required to use their FAU e-mail and are advised to check it frequently for important announcements. *All e-mail communication should be via the Contact Professor tab on the Blackboard tool bar.*

POLICY FOR LATE ASSIGNMENTS:

All assignments and quizzes must be completed on time unless arrangements have been made.

ACADEMIC INTEGRITY:

Student work is done independently. Collaboration on quizzes is a breach of academic integrity.

TOPICAL OUTLINE

- I. Fundamentals of drug therapy across drug classes for safe nursing practice. Information on therapeutic and adverse effects, indications for use, and drug interactions.
- II. Medication differences and precautions across the lifespan (care of infants, children, pregnant women, adults, and older adults) including:
 - a. Incidence and prevalence of diseases in age based specialty populations
 - b. Differences in disease presentation and drug administration among older adults
 - c. Safety concerns and appropriate drugs for vulnerable age groups (infants, children, pregnant women, and older adults)

- d. Culture and ethnicity based considerations in specialty populations
- e. Genetic determinates of drug responses
- f. Planning for comorbidities

III. Role of the nurse including:

- a. Role transition and responsibility
- b. Integration of knowledge from nursing and biopsychosocial fields
- c. Clinical judgement in medication administration
- d. Evidenced based practice, interpreting research, use of clinical guidelines and expert opinions for pharmacologic treatment
- e. Collaboration with other providers and interdisciplinary teams
- f. Current issues, ethics, policies, privacy, confidentiality, and trends in health care and their effect on health care
- g. Reimbursement and costs
- h. Navigating the complex healthcare system, advocating for change

IV. Nursing grounded in caring concepts including:

- a. Authentic presence, relationship of mutual trust, and patient centered care
- b. Health promotion, encouraging healthy lifestyle changes, motivational interviewing
- c. Patient counseling – including genetic counseling, family counseling and individual counseling.
- d. Becoming an advocate for patients, families, caregivers, communities, and members of the healthcare team

V. Using informatics and health care technologies for safe drug administration including:

- a. Use of drug data bases
- b. Using the electronic medical records
- c. Lifelong learning

COURSE SCHEDULE

Date	LEARNING MODULES
August 20 th	<p style="text-align: center;">INTRODUCTION TO PHARMACOLOGY Orientation to Pharmacology-1 Application of Pharmacology-2 Drug Regulation, Development and Technology-3 BASIC PRINCIPLES OF PHARMACOLOGY Pharmacokinetics-4 Pharmacodynamics-5 Drug Interactions-6 Adverse Drug Reactions and Medication Errors-7 Individual Variations in Drug Responses and Pharmacogenomics-8</p>
August 27 th	<p style="text-align: center;">DRUG THERAPY ACROSS THE LIFESPAN Drug Therapy During Pregnancy-9 Drug Therapy in Pediatric Patients-10</p>

	<p>Drug Therapy in Geriatric Patients-11</p> <p>PERIPHERAL NERVOUS SYSTEM DRUGS</p> <p>Neuropharmacology-12</p> <p>Physiology of the Peripheral Nervous System-13</p> <p>Muscarinic Agonists and Antagonists-14</p> <p>Cholinesterase Inhibitors for Myasthenia-15</p> <p>Neuromuscular Blocking Agents-16</p> <p>Adrenergic Agonists-17</p> <p>Adrenergic Antagonists-18</p> <p>Indirect-Acting Antiadrenergic Agents-19</p>
September 3 rd	Labor Day No Class
September 10 th	EXAM # 1
September 17 th	<p>DRUGS THAT AFFECT FLUID AND ELECTROLYTES</p> <p>Diuretics-41</p> <p>DRUGS FOR HEART AND BLOOD VESSELS</p> <p>Review of Hemodynamics-43</p> <p>Drugs Acting on RAAS-44</p> <p>Calcium Channel Blockers-45</p> <p>Vasodilators-46</p>
Date	LEARNING MODULES Topic and Chapter Readings in Lehne
September 24 th	<p>Drugs for Hypertension-47</p> <p>Drugs for Heart Failure-48</p> <p>Antidysrhythmic Drugs-49</p>
October 1 st	<p>Drugs to Treat Dyslipidemia-50</p> <p>Drugs to Treat Angina-51</p> <p>Anticoagulants, Antiplatelets, Thrombolytics-52</p> <p>Management of STEMI-53</p> <p>HEMATOLOGIC DISORDERS</p> <p>Drugs for Deficiency Anemias-55</p> <p>Hematopoietic Growth Factors-56</p>
October 8th	EXAM # 2
<i>October 12th</i>	<i>Last Day to Drop without Receiving an "F"</i>
October 15 th	<p>CENTRAL NERVOUS SYSTEM DRUGS</p> <p>Introduction to CNS Pharmacology-20</p> <p>Drugs for Parkinson's Disease-21</p> <p>Drugs for Alzheimer's Disease-22</p> <p>Drugs for Epilepsy-24</p> <p>Drugs for Muscle Spasm and Spasticity-25</p> <p>Opioid and Other Analgesics-28</p> <p>Drugs for Headache-30</p> <p>Antipsychotics-31</p> <p>Antidepressants-32</p> <p>Drugs for Bipolar Disorder-33</p> <p>Sedative-Hypnotic Drugs-34</p> <p>Management of Anxiety-35</p> <p>Drugs for ADHD-36</p> <p>Drugs for Obesity-82</p>
October 22nd	EXAM # 3

October 29 th	<p align="center">ENDOCRINE DISORDERS Drugs for Diabetes Mellitus-57 Drugs for Thyroid Disorders-58 Drugs for Hypothalamic and Pituitary Disorders-59 Drugs for Disorders of the Adrenal Cortex-60</p>
Date	<p>LEARNING MODULES Topic and Chapter Readings in Lehne</p>
November 5 th	<p align="center">ANTIINFLAMMATORY ANTIALLERGIC/IMMUNOGENIC Childhood Immunizations-68 COX Inhibitors, NSAIDs, Acetaminophen-71 Glucocorticoids-72 DRUGS FOR JOINT DISORDERS Drug Therapy for Rheumatoid Arthritis-73 Drug Therapy for Gout-74 Drugs for Osteoporosis-75</p>
November 12 th	<p align="center">No Class-Veteran's Day RESPIRATORY TRACT DRUGS Antihistamines-70 Drugs for Asthma-76 Drugs for Allergic Rhinitis, Cough, and Colds-77 Smoking Cessation-39 Dietary Supplements-108</p>
November 19th	EXAM # 4
November 26 th	<p align="center">GASTROINTESTINAL DRUGS Drugs for Peptic Ulcer Disease-78 Laxatives-79 Other Gastrointestinal Drugs-80 Vitamins-81 INFECTIOUS DISEASES Chapters 83-92, 94-95 DRUGS AFFECTING THE GENITOURINARY SYSTEM Estrogens and Progestins-61 Birth Control-62 Androgens-65 Drugs for Erectile Dysfunction and BPH-66</p>
December 3rd	COMPREHENSIVE FINAL EXAM

COLLEGE OF NURSING POLICIES

Policies below may be found in:

- a). The faculty reserves the right to make changes in course content and requirements.
- b). The Christine E. Lynn College of Nursing Undergraduate Handbook located at:
<http://nursing.fau.edu/index.php?main=3&nav=526>
- c). Florida Atlantic University's Academic Policies and Regulations
<http://www.fau.edu/academic/registrar/catalogRevs/academics.php> and
<http://www.fau.edu/regulations>

CODE OF ACADEMIC INTEGRITY:

The University policy regarding academic integrity is enforced in this course. Students at Florida Atlantic University are expected to maintain the highest ethical standards. Dishonesty is considered a serious breach of these ethical standards, because it interferes with the University mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Dishonesty is also destructive of the University community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see:
http://www.fau.edu/regulations/chapter4/4.001_Code_of_Academic_Integrity.pdf

The College of Nursing regards adherence to the Code of Academic Integrity as a professional competency and an expectation of all students. ANY act of dishonesty that violates the code of academic integrity and misrepresents your efforts or ability is grounds for immediate failure of the course.

DISABILITY STATEMENT:

In compliance with the Americans with Disabilities Act (ADA), students who require special accommodations due to a disability to properly execute coursework must register with the Office for Students with Disabilities (OSD) located in Boca Raton – SU 133 (561-297-3880), in Davie – MOD 1 (954-236-1222), in Jupiter – SR 117 (561-799-8585) or at the Treasure Coast – CO 128 (772-873-3305), and follow all OSD procedures.

INCOMPLETE POLICY:

The Incomplete Grade Policy is enforced. A student who registers for a course but fails to complete the course requirements, without dropping the course, will normally receive a grade of "F" from the course instructor. A student who is passing a course but has not completed all the required work because of exceptional circumstances may, with the approval of the instructor, temporarily receive a grade of "I" (incomplete). This must be changed to a grade other than "I" within a specified time frame, not to exceed one calendar year from the end of the semester during which the course was taken.

ATTENDANCE POLICY:

Students are expected to attend all of their scheduled University classes and to satisfy all academic objectives as outlined by the instructor. The effect of absences upon grades is determined by the instructor, and the University reserves the right to deal at any time with individual cases of nonattendance. Students are responsible for arranging to make up work

missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal obligations, or participation in University-approved activities. Examples of University approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances, and debate activities. It is the student's responsibility to give the instructor notice prior to any anticipated absence and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. Instructors must allow each student who is absent for a University-approved reason the opportunity to make up work missed without any reduction in the final course grade as a direct result of such absence.

RELIGIOUS ACCOMMODATION:

In accordance with rules of the Florida Board of Education and Florida law, students have the right to reasonable accommodations from the University in order to observe religious practices and beliefs with regard to admissions, registration, class attendance, and the scheduling of examinations and work assignments. Students who wish to be excused from coursework, class activities, or examinations must notify the instructor in advance of their intention to participate in religious observation and request an excused absence. The instructor will provide a reasonable opportunity to make up such excused absences. Any student who feels aggrieved regarding religious accommodations may present a grievance to the director of Equal Opportunity Programs. Any such grievances will follow Florida Atlantic University's established grievance procedure regarding alleged discrimination. **USE OF STUDENT COURSE MATERIAL** The Christine E. Lynn College of Nursing may use students' course-related materials for legitimate institutional purposes, such as accreditation, university review process, or state board of nursing review process, etc. In such cases, materials will be used within the college and university.



CHRISTINE E. LYNN COLLEGE OF NURSING

STATEMENT OF PHILOSOPHY

Nursing is a discipline of knowledge and professional practice grounded in caring. Nursing makes a unique contribution to society by nurturing the wholeness of persons and environment in caring. Caring in nursing is an intentional mutual human process in which the nurse artistically responds with authentic presence to calls from persons to enhance well-being. Nursing occurs in nursing situations: co-created lived experiences in which the caring between nurses and persons enhance well-being. Nursing is both science and art. Nursing science is the evolving body of distinctive nursing knowledge developed through systematic inquiry and research. The art of nursing is the creative use of nursing knowledge in practice. Knowledge development and practice in nursing require the complex integration of multiple patterns of knowing. Nurses collaborate and lead interprofessional research and practice to support the health and well-being of persons inextricably connected within a diverse global society.

Persons as participant in the co-created nursing situation, refers to individual, families or communities. Person is unique and irreducible, dynamically interconnected with others and the environment in caring relationships. The nature of being human is to be caring. Humans choose values that give meaning to living and enhance well-being. Well-being is creating and living the meaning of life. Persons are nurtured in their wholeness and well-being through caring relationships.

Beliefs about learning and environments that foster learning are grounded in our view of person, the nature of nursing and nursing knowledge and the mission of the University. Learning involves the lifelong creation of understanding through the integration of knowledge within a context of value and meaning. A supportive environment for learning is a caring environment. A caring environment is one in which all aspects of the person are respected, nurtured and celebrated. The learning environment supports faculty-student relationships that honor and value the contributions of all and the shared learning and growth.

The above fundamental beliefs concerning Nursing, Person and Learning express our values and guides the actions of Faculty as they pursue the missions of teaching, research/scholarship and service shared by the Christine E. Lynn College of Nursing and Florida Atlantic University.

April 2012