

**NR 255 Course Outline as of Fall 2009****CATALOG INFORMATION**

Dept and Nbr: NR 255 Title: COMP PHARMACOLOGY UPDATE

Full Title: Comprehensive Pharmacology Update

Last Reviewed: 10/17/2011

Units	Course Hours per Week		Nbr of Weeks		Course Hours Total	
Maximum	2.00	Lecture Scheduled	2.00	17.5	Lecture Scheduled	35.00
Minimum	2.00	Lab Scheduled	0	8	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	2.00		Contact Total	35.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 70.00

Total Student Learning Hours: 105.00

Title 5 Category: AA Degree Applicable

Grading: Grade Only

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly:

**Catalog Description:**

This course examines the basis for pharmacological treatment of common disease states. Selected drug classifications will be discussed with emphasis on pharmacokinetics and dynamics, mechanisms of action, clinical use, adverse reactions, drug interactions, contraindications, patient education and compliance. Intended for students in the ADN, LVN, Psychiatric Technician, and Pharmacy Technician programs.

**Prerequisites/Corequisites:****Recommended Preparation:**

Course Eligibility for ENGL 100 and Course Completion of ANAT 140 OR Course Eligibility for EMLS 100 ( or ESL 100) and Course Completion of ANAT 140

**Limits on Enrollment:****Schedule of Classes Information:**

Description: This course examines the basis for pharmacological treatment of common disease states. Selected drug classifications will be discussed. Intended for students in the ADN, LVN and Psychiatric Technician Programs. (Grade Only)

Prerequisites/Corequisites:

Recommended: Course Eligibility for ENGL 100 and Course Completion of ANAT 140 OR Course Eligibility for EMLS 100 ( or ESL 100) and Course Completion of ANAT 140

Limits on Enrollment:

Transfer Credit:

Repeatability: Two Repeats if Grade was D, F, NC, or NP

### **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

<b>AS Degree:</b>	<b>Area</b>	Effective:	Inactive:
<b>CSU GE:</b>	<b>Transfer Area</b>	Effective:	Inactive:
<b>IGETC:</b>	<b>Transfer Area</b>	Effective:	Inactive:
<b>CSU Transfer:</b>		Effective:	Inactive:
<b>UC Transfer:</b>		Effective:	Inactive:

**CID:**

**Certificate/Major Applicable:**

Not Certificate/Major Applicable

### **COURSE CONTENT**

#### **Outcomes and Objectives:**

Upon completion of this course students will be able to:

1. Describe drug mechanism of action, receptors, principles of drug action and special considerations as pertains to the older adult, pediatrics and childbearing patients.
2. Discuss variables that influence pharmacokinetic and pharmacodynamic principles of drug action.
3. Describe functions of components of the central nervous system and common neurotransmitter substances.
4. Implement a plan of care for individuals who require the administration of opioid analgesics, opioid antagonists and nonsteroidal anti-inflammatory drugs.
5. Identify characteristics of commonly used benzodiazepines, barbiturates, anti-anxiety and sedative-hypnotic agents.
6. Identify major anticonvulsant drug classifications, including examples of drugs and their primary method of seizure control as well as the common adverse reactions.
7. Differentiate between antidepressant drugs: tricyclic antidepressants, second-generation agents, monoamine oxidase inhibitors, selective serotonin reuptake inhibitors and miscellaneous agents, with the corresponding side effect profile.
8. Provide examples of cardiovascular agents including mechanism of action, dosage and common side effects for the cardiac glycosides, antidysrhythmics, antihypertensives, antianginals, anticoagulants, and hyperlipidemic agents.
9. Discuss the use of cromoglycol, sympathetic agonists, ipratropium,

leukotriene antagonists, xanthine derivatives, and corticosteroid agents in the treatment of respiratory diseases.

10. Compare different antimicrobial therapeutic classifications and understand their mechanism of actions and side effects.

### Topics and Scope:

1. Principles of drug action/side effects, adverse reactions.
2. Pharmacokinetics, dynamics in older adults, & pediatrics, maternal patients and special considerations.
3. Central Nervous System analgesics
4. Antianxiety, sedatives/hypnotics, psychotropic agents
5. Anticonvulsants
6. Cardiovascular system, congestive heart failure, cardiac glycosides, and antihyperlipidemic
7. Antidysrhythmics
8. Diuretics, antihypertensives
9. Vasodilators, antihemorrhagic drugs
10. Blood, anticoagulants
11. Respiratory system, bronchodilators, antiasthmatics
12. Anti-infective drugs

### Assignment:

1. Read and review assigned test pages, approximately 34 pages per week, lectures, and flashcards.
2. Ten quizzes, one midterm, one final.
3. Ten one-page writing assignments answering case scenario questions.

### Methods of Evaluation/Basis of Grade:

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments are more appropriate for this course.

Writing  
0 - 0%

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Case study

Problem solving  
10 - 15%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

None

Skill Demonstrations  
0 - 0%

**Exams:** All forms of formal testing, other than skill performance exams.

Multiple choice, True/false, Completion

Exams  
75 - 85%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

Class attendance and participation

Other Category  
5 - 10%

**Representative Textbooks and Materials:**

Pharmacology in Nursing, McKenry, L. et al (2005) Mosby.

ISBN#:0-323-01822-x

Instructor prepared materials

Pharmacology in Nursing website:

[http://evolve.elsevier.com/productPages/s\\_0323030084.html](http://evolve.elsevier.com/productPages/s_0323030084.html)

National Council of State Boards of Nursing Examination website

<http://www.ncsbn.org/>