

**PHARM256.1 Course Outline as of Fall 2014****CATALOG INFORMATION**

Dept and Nbr: PHARM256.1 Title: ADVANCED PHARMACOLOGY

Full Title: Advanced Pharmacology

Last Reviewed: 4/28/2014

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	1.00	Lecture Scheduled	1.00	17.5	Lecture Scheduled	17.50
Minimum	1.00	Lab Scheduled	0	8	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	1.00		Contact Total	17.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 35.00

Total Student Learning Hours: 52.50

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 advanced level course examines the basis for pharmacological treatment of more complex disease states. Drug classifications will be discussed with emphasis on pediatric and geriatric pharmacology, medication administration including: nutrition and electrolytes, immunologic agents, anti-neoplastic agents, gastrointestinal agents, and endocrine agents. Students will follow patients and aspects of their care as written in case presentations and studies. This course is intended for students in the Associate Degree in Nursing, Vocational Nursing, Psychiatric Technician, and Pharmacy Technician programs.

**Prerequisites/Corequisites:**

Course Completion or Current Enrollment in PHARM 255

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

Description: This advanced level course examines the basis for pharmacological treatment of more complex disease states. Drug classifications will be discussed with emphasis on pediatric

and geriatric pharmacology, medication administration including: nutrition and electrolytes, immunologic agents, anti-neoplastic agents, gastrointestinal agents, and endocrine agents. Students will follow patients and aspects of their care as written in case presentations and studies. This course is intended for students in the Associate Degree in Nursing, Vocational Nursing, Psychiatric Technician, and Pharmacy Technician programs. (Grade Only)  
Prerequisites/Corequisites: Course Completion or Current Enrollment in PHARM 255  
Recommended:

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

**CID:**

**Certificate/Major Applicable:**

Both Certificate and Major Applicable

## **COURSE CONTENT**

### **Outcomes and Objectives:**

Upon completion of the course, students will be able to:

1. Describe drug mechanism of action with respect to:
  - a) receptors
  - b) pharmacokinetics
  - d) pharmacodynamics
2. Describe the special pharmacological considerations of the older adult and pediatric patients.
3. Discuss variables that influence:
  - a) vitamin and mineral replacement
  - b) fluid and electrolyte replacement
  - c) nutritional support
4. Describe functions and components of the immunologic system and agents related to:
  - a) Human Immunodeficiency Virus (HIV)
  - b) Acquired Immune Deficiency Syndrome (AIDS)
  - c) Vaccines
5. Implement a plan of care for individuals who require the administration of gastrointestinal anti-ulcer medications.
6. Identify characteristics of common endocrine disorders within the:
  - a) pituitary
  - b) thyroid
  - c) parathyroid
  - d) pancreas

- e) adrenal systems
7. Identify major anti-diabetic drug classifications, and their primary method of glucose control as well as the common adverse reactions.

### Topics and Scope:

1. Principles of drug pediatric and geriatric pharmacology and Black Box warnings.
2. Drug mechanism of action, receptors, and dynamics in older adults, and in children, when administering medication in community settings.
3. Nutrition, vitamins, and electrolyte support and factors that influence their administration in patient specific parameters.
4. Immunologic agents related to Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) and vaccines.
5. Anti-neoplastic agents.
6. Gastrointestinal tract disorders, related agents and anti-ulcer drugs, and plan of care.
7. Characteristics and endocrine agents acting on of the pituitary, thyroid, parathyroid, pancreatic and adrenal systems.
8. Anti-diabetic agents, insulins and oral agents for glucose control.

### Assignment:

1. Read and review assigned text pages, approximately 20 to 30 pages per week, lectures, and flashcards.
2. Six quizzes, one midterm, one final.
3. Six one-page writing assignments that answer case scenario questions.
4. Class online participation.

### 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.

Written case scenarios.

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.

Quizzes, midterm and final.

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 A Nursing Process Approach, Kee, Hayes, McCuiston, 7th edition, 2010  
Instructor prepared materials