DEPARTMENT  Health Occupations  
COURSE NUMBER  NRS 172

TITLE  Advanced Pharmacology

THIS COURSE IS CLASSIFIED AS:

DEGREE APPLICABLE

UNIT VALUE  2

LECTURE HOURS PER WEEK BASED ON 18 WEEK SEMESTER  2

ENTRANCE SKILLS, PREREQUISITES, OR CO-REQUISITES

Prerequisite: NRS 160.
Corequisite: Concurrent enrollment required in NRS 171L.

CATALOG COURSE DESCRIPTION

Fundamental principles of drug action and the application of specific drugs on the treatment of renal diseases for patients with alterations of respiration, circulation, the blood, endocrine function, neurological function, vision, and hearing. Two hours lecture per week.

CLASS SCHEDULE COURSE DESCRIPTION

Fundamental principles of drug action and the application of specific drugs on the treatment of renal diseases for patients with alterations of respiration, circulation, the blood, endocrine function, neurological function, vision, and hearing.

COURSE OBJECTIVES

Upon successful completion of this course, the student should be able to:

1. demonstrate knowledge of theoretical concepts of pharmacology to patients with alterations of respiration, circulation, the blood, renal function, endocrine function, neurological function, vision, and hearing

2. describe safe, ethical and legal principle of nursing in compliance with the nurse practice act
REQUIRED TEXTS AND MATERIALS

Clinical Drug Therapy, Abrams
Pharmacological Aspects of Nursing Care, Reiss

The reading for this course is:

PRIMARILY COLLEGE LEVEL

REQUIRED ASSIGNMENTS OUTSIDE OF CLASS

Over an 18 week presentation of the course three hours per week are required for each unit of credit. Two hours of independent work done out of class are required for each hour of lecture. Students will be required to complete the following types of assignments outside of the regular class time:

Study
Answer questions
Practice skills
Read required materials

DEGREE APPLICABLE COURSE:
2 hours of independent work done out of class per each hour of lecture or class work or 3 hours lab, practicum, or the equivalent, per unit.

COURSE CONTENT

I. Cardiac Stimulants and Depressants
A. Discuss inotropic, chronotropic, & dromotropic effects on the heart
B. Discuss actions of the following:
   1. Cardiac glycosides
   2. Antiarrhythmic agents
   3. Cardiac stimulants
C. Explain methods of administration for the above drugs
D. Describe side effects, dosage incompatibilities
E. Discuss key nursing implications for the above
F. Describe nursing assessment and the interventions/patient education

II. Drugs that Dilate Blood Vessels
A. Discuss actions of the following:
   1. Coronary vasodilators
   2. Peripheral vasodilators
B. Explain methods of administration for the above drugs
C. Describe side effects, dosage incompatibility
D. Discuss key nursing implications for above
III. Drug Affecting Blood Clotting/ Antihypertensives
A. Discuss actions of the following:
   1. Anticoagulants
   2. Thrombolytic agents
   3. Hemostatic agents
   4. Antihypertensives

IV. Drugs Used to Treat Respiratory/Disorders
A. Discuss actions of the following:
   1. Antihistamines
   2. Decongestants
B. Explain methods of administration for the above drug
   1. Proetz position
   2. Parkinson’s position
C. Discuss key nursing implications for above
D. Describe nursing assessment and interventions/ patient education
E. Discuss actions of the following:
   1. Expectorants
   2. Antitussives
   3. Bronchodilators
   4. Mucolytics
   5. Miscellaneous respiratory drugs
F. Explain methods of administration for the above drugs
G. Discuss key nursing implications for above
H. Describe nursing assessment and interventions/ patient education

V. Drugs Used to Correct Hormone Imbalance
A. Discuss actions of the following:
   1. Insulin
   2. Oral hypoglycemic agents
B. Explain methods of administration for above
C. Review calculations of insulin doses and use of equipment
D. Discuss key nursing implications for above
E. Describe nursing assessment and interventions/ patient education
F. Discuss actions of the following:
   1. Thyroid drugs
   2. Parathyroid drugs
   3. Pituitary drugs
G. Explain methods of administration for the above drugs
H. Discuss key nursing implications for above
I. Describe nursing assessment and interventions/ patient education

VI. Drugs Affecting the Central Nervous System
A. Discuss actions of the following:
   1. Anti-Anxiety drugs (anxiolytic)
   2. Antipsychotic drugs
   3. Affective disorder drugs
   4. Anti-manic drugs
B. Explain methods of administration for above
C. Discuss key nursing implications for above
D. Describe nursing assessment and interventions/ patient education
E. Discuss actions of the following:
   1. Anorexiant
   2. Analgesic
F. Explain methods of administration for the above drugs
G. Discuss key nursing implications for the above
H. Describe nursing assessment and interventions/ patient education
I. Discuss actions of the following:
   1. Neuromuscular blocking agents
   2. Centrally acting skeletal muscle relaxants
   3. Dantrolene (Dantrum)
   4. Skeletal muscle stimulants
J. Explain methods of administration for the above drugs
K. Discuss key nursing implications for the above
L. Describe nursing assessment and interventions/ patient education
M. Discuss actions of the following:
   1. Dopaminergic agents
   2. Anticholinergic agents
N. Explain methods of administration for the above drugs
O. Discuss key nursing implications for the above
P. Describe nursing assessment and interventions/ patient education
Q. Discuss actions of anticonvulsant drugs

VII. Drugs Used in the Eye
A. Discuss actions of the following:
   1. Agents that decrease the formation of aqueous humor
   2. Agents that increase the outflow of aqueous humor
   3. Agents that decrease formation and increase outflow of aqueous humor
   4. Mydriatic drugs
   5. Ophthalmic drugs infective agents
   6. Antiseptics
   7. Local anesthetics
   8. Corticosteroids
   9. Miscellaneous eye drugs
B. Explain methods of administration for the above drugs
C. Discuss key nursing implications for the above
D. Describe nursing assessment and interventions/ patient education
METHODS OF INSTRUCTION

Lecture/Discussion

METHODS OF ASSESSMENT

FOR DEGREE APPLICABLE COURSES:
Students will be graded, at minimum, in at least one of the following categories. If "essay" is not checked, it must be explained why essays are an inappropriate basis for at least part of the grade in the course.

ESSAY OR SUBSTANTIAL WRITING ASSIGNMENT
Includes not only "blue book" examinations but any written assignment of sufficient length and complexity to require students to select and organize ideas as well as to explain them.

COMPUTATIONAL OR NON-COMPUTATIONAL PROBLEM-SOLVING
Critical thinking should be demonstrated by the solution of unfamiliar problems that admits various solutions or various strategies for achieving the solution.

SKILL DEMONSTRATION

A course grade may not be based solely on attendance.

Adopted: December, 1998
CITRUS COMMUNITY COLLEGE DISTRICT
REQUISITE APPROVAL

The Requisite Approval form must be completed for any course that carries a prerequisite, corequisite, or limitation on enrollment as indicated on the Course Approval form.

Department: Health Occupations

Course number: NRS 172

Title: Advanced Pharmacology

I. RECOMMENDED REQUISITE(S):

Prerequisite: NRS 160.
Corequisite: Concurrent enrollment required in NRS 171L.

II. TYPE OF REQUISITE AND THE APPROPRIATE LEVEL OF SCRUTINY. CIRCLE THE APPROPRIATE LETTER:

B. SEQUENTIAL/CONCURRENT

Include in the content review a comparison of the skills, concepts and information taught in the first or concurrent course to those required at entrance for success in the second course.

III. CONTENT REVIEW. FACULTY SHOULD BASE CONTENT REVIEW ON THE SYLLABUS AND OUTLINE OF RECORD, TESTS, RELATED INSTRUCTIONAL MATERIALS, TESTS, AND GRADING CRITERIA. CHECK THE APPROPRIATE BOX TO INDICATE THAT THE CONTENT REVIEW HAS BEEN COMPLETED:

☑ For courses to be used as requisites or advisories, compare the knowledge and/or skills needed at entry with those taught in the requisite, concurrent, or advisory course.

A. LIST THE SPECIFIC SKILLS, CONCEPTS AND INFORMATION REQUIRED FOR SUCCESS IN THE COURSE:

1. Medical-surgical nursing with clinical practice.

2. Theory of care for patients with alterations of respiration, circulation, the blood, the elimination of liquid waste, endocrine function, neurological function, vision, and hearing.

B. LIST THE SPECIFIC SKILLS, CONCEPTS AND INFORMATION THE STUDENT WILL ATTAIN IN THE REQUISITE COURSE OR THAT WILL BE MEASURED WITH THE REQUISITE TEST:

1. Medical-surgical nursing with clinical practice.
NOTE: Per District policy and procedures the completed and approved Requisite Approval form is considered to be part of the official course outline of record.