

# VNRS 172: ADVANCED PHARMACOLOGY

## Citrus College Course Outline of Record

Heading	Value
Effective Term:	Fall 2023
Credits:	2
Total Contact Hours:	36
Lecture Hours :	36
Lab Hours:	0
Hours Arranged:	0
Outside of Class Hours:	72
Prerequisite:	VNRS 162.
Transferable to CSU:	No
Transferable to UC:	No
Grading Method:	Standard Letter

## Catalog Course Description

Fundamental principles of drug action and the application of specific drugs for the treatment of patients with alterations of respiration, renal system, circulation, the blood, endocrine function, neurological function, vision, and hearing. 36 lecture hours.

## Course Objectives

- Demonstrate knowledge of theoretical concepts of pharmacology to clients with alterations of respiration, circulation, the blood, renal function, endocrine function, neurological function, vision, and hearing.
- Describe safe, ethical and legal principles of nursing in compliance with the Nurse Practice Act.

## Major Course Content

1. Cardiac Stimulants and Depressants
  - a. Discuss inotropic, chronotropic, & dromotropic effects on the heart
  - b. Discuss actions of the following drug classes:
    - i. Cardiac glycosides
    - ii. Antiarrhythmic agents
    - iii. Cardiac stimulants
  - c. Explain methods of administration for the above drug classes
  - d. Describe side effects, adverse effects, and dosage incompatibilities for the above drug classes
  - e. Discuss key nursing implications for the above drug classes
  - f. Describe nursing assessments, interventions, and client education for the above drug classes
2. Drugs that Dilate Blood Vessels
  - a. Discuss actions of the following drug classes:
    - i. Coronary vasodilators
    - ii. Peripheral vasodilators
  - b. Explain methods of administration for the above drug classes
  - c. Describe side effects, adverse effects, and dosage incompatibility for the above drug classes
  - d. Discuss key nursing implications for above drug classes
3. Drug Affecting Blood Clotting/Antihypertensives
  - a. Discuss actions of the following drug classes:
    - i. Anticoagulants
    - ii. Thrombolytic agents
    - iii. Hemostatic agents
    - iv. Antihypertensives
4. Drugs Used to Treat Respiratory/Disorders
  - a. Discuss actions of the following drug classes:
    - i. Antihistamines
    - ii. Decongestants
    - iii. Expectorants
    - iv. Antitussives
    - v. Bronchodilators
    - vi. Mucolytics
  - b. Explain methods of administration for the above drug classes
  - c. Discuss key nursing implications for above drug classes
  - d. Describe nursing assessments, interventions, and client education for the above drug classes
5. Drugs Used to Correct Hormone Imbalance
  - a. Discuss actions of the following drug classes:
    - i. Insulins
    - ii. Oral hypoglycemic agents
  - b. Explain methods of administration for above drug classes
  - c. Review calculations of insulin doses and use of equipment
  - d. Discuss key nursing implications for above drug classes
  - e. Describe nursing assessments, interventions, and client education for above drug classes
  - f. Discuss actions of the following drug classes:
    - i. Thyroid drugs
    - ii. Parathyroid drugs
    - iii. Pituitary drugs
  - g. Explain methods of administration for the above drug classes
  - h. Discuss key nursing implications for above drug classes
    - i. Describe nursing assessments, interventions, and client education for above drug classes
6. Drugs Affecting the Central Nervous System
  - a. Discuss actions of the following drug classes:
    - i. Anti-Anxiety drugs (anxiolytic)
    - ii. Antipsychotic drugs
    - iii. Affective disorder drugs
  - b. Explain methods of administration for above drug classes
  - c. Discuss key nursing implications for above drug classes
  - d. Describe nursing assessments, interventions, and client education of the above drug classes
  - e. Discuss actions of the following drug classes:
    - i. Anorexiants
    - ii. Antiepileptic drugs
  - f. Explain methods of administration for the above drug classes
  - g. Discuss key nursing implications for above drug classes
  - h. Describe nursing assessments, interventions, and client education for the above drug classes
    - i. Discuss actions of the following drug classes:

- i. Neuromuscular blocking agents
  - ii. Centrally acting skeletal muscle relaxants
  - iii. Dantrolene (Dantrium)
  - iv. Skeletal muscle stimulants
  - j. Explain methods of administration for the above drug classes
  - k. Discuss key nursing implications for the above drug classes
  - l. Describe nursing assessments, interventions, and client education for the above drug classes
  - m. Discuss actions of the following drug classes:
    - i. Dopaminergic agents
    - ii. Anticholinergic agents
  - n. Explain methods of administration for the above drug classes
  - o. Discuss key nursing implications for the above drug classes
  - p. Describe nursing assessments, interventions, and client education for the above drug classes
  - q. Discuss actions of anticonvulsant drugs
3. Drugs Used in the Eye
- a. Discuss actions of the following drug classes:
    - i. Agents that decrease the formation of aqueous humor
    - ii. Agents that increase the outflow of aqueous humor
    - iii. Agents that decrease formation and increase outflow of aqueous humor
    - iv. Mydriatic drugs
    - v. Ophthalmic drugs infective agents
    - vi. Antiseptics
    - vii. Local anesthetics
    - viii. Corticosteroids
    - ix. Miscellaneous eye drugs
  - b. Explain methods of administration for the above drug classes
  - c. Discuss key nursing implications for the above drug classes
  - d. Describe nursing assessments, interventions, and client education for the above drug classes

## Suggested Reading Other Than Required Textbook

Kaplan computer software and reading materials

## Examples of Required Writing Assignments

Nursing care plan for a client from clinical experience or a case study as assigned by the professor. The focus of the assignment will be on client's pharmacotherapy and nursing interventions.

## Examples of Outside Assignments

Students must submit a completed printout from one of the two online, non-proctored Kaplan tests for pharmacology prior to the day of the final exam in class.

## Instruction Type(s)

Lecture, Online Education Lecture