

NOVA COLLEGE-WIDE COURSE CONTENT SUMMARY EMS 202 – PARAMEDIC PHARMACOLOGY (2 CR.)

Course Description

Focuses on advanced pharmacological interventions, medications and their effects.
Lecture 2 hours. Total 2 hours per week.

General Course Purpose

The purpose of this course is to continue to teach additional medications used and encountered by the Paramedic in treatment of patients. Focuses on the principles of pharmacokinetics, pharmacodynamics and drug administration.

Course Prerequisites/Corequisites

None.

Course Objectives

Upon completing the course, the student will be able to:

- a) Discuss pharmacokinetics and pharmacodynamics of drugs
- b) Identify components of drug storage and security
- c) Explain the effects of medications on the body
- d) Discuss the classifications of medications and the mechanism of action for each
- e) Choose the appropriate pharmacological intervention based on patient complaint.

Major Topics to be Included

- a) Advanced Pharmacologic Concepts
 - a. Pharmacokinetics and pharmacodynamics
 - b. Drug Terminology
 - c. Sources of Drugs
 - d. Drug Forms
 - e. Schedules of medications
- b) Drug Storage and Security
 - a. Methods of storage and security
 - b. Factors affecting Drug Potency
 - c. Controlled Substances
- c) Effects of Medications on the Body
 - a. Intestinal Absorption
 - b. Biotransformation
 - c. Drug Metabolism
 - d. Renal Excretion
 - e. Toxicity
- d) Medication Classifications
 - a. Alkalinizing Agents
 - b. Analgesics
 - c. Antibiotics
 - d. Anticonvulsant - Sedative
 - e. Antihypertensives
 - f. Beta-Agonists
 - g. Beta-blockers
 - h. Calcium Channel Blockers

- i. Corticosteroids
- j. Diuretics
- k. Dysrhythmics
- l. Fibrinolytics
- m. Neuromuscular Blocking Agents
- n. Platelet Inhibitors
- o. Sympathomimetics
- p. Xanthines