

Master Syllabus

DEH 2502 - Pharmacology in the Dental Practice

Division: Health Sciences

Department: Dental Health Sciences

Credit Hour Total: 2.0

Lecture Hrs: 2.0

Prerequisite(s): DEH 2402 AND DEH 2403

Other Prerequisite(s): AND Restricted to Majors

Date Revised: February 2014

Course Description:

Overview of the conventional drug classes with emphasis on the actions, effects and indications for those used in the dental practice.

General Education Outcomes:

- Critical Thinking/Problem Solving Competency

Course Outcomes:

Nitrous Oxide

Describe the physiologic effects of nitrous oxide sedation and discuss the potential adverse effects related to chronic nitrous oxide exposure.

Assessment Method: Locally developed exams

Performance Criteria:

70% or higher achieved

Antimicrobials

Differentiate the various classes of antimicrobial agents in terms of mechanism of action, spectrum, potential toxicity and known drug interactions.

Assessment Method: Locally developed exams

Performance Criteria:

70% or higher achieved

Hormones and Endocrine Agents

Summarize the actions of thyroid, parathyroid, pancreatic and ovarian hormones and relate the systemic effects of selected pharmacologic agents used in the treatment of endocrine disease.

Assessment Method: Locally developed exams

Performance Criteria:

70% or higher achieved

Sedative and Psychotropic Agents

Compare the mechanism of action of selected sedative and psychotropic agents and evaluate the safety and general side-effect profiles of these groups.

Assessment Method: Locally developed exams

Performance Criteria:

70% or higher achieved

Autonomic Drugs

Compare and contrast the actions and effects of the two divisions of the autonomic nervous system and interpret the anticipated effects of selected autonomic agents.

Assessment Method: Locally developed exams

Performance Criteria:

70% or higher achieved

Analgesic and Anti-Inflammatory Agents

Compare the mechanism of action of selected analgesic and antiinflammatory agents and construct a formula for their use in the practice of dentistry.

Assessment Method: Locally developed exams

Performance Criteria:

70% or higher achieved

Pulmonary and Gastro-Intestinal Agents

Describe the basic types of obstructive pulmonary disease and inflammatory gastro-intestinal diseases and discuss the actions of the medications used in the treatment of each.

Assessment Method: Locally developed exams

Performance Criteria:

70% or higher achieved

Pharmacology and Physiology of Local Anesthetics

Describe the physiology of the peripheral nervous system and summarize the pharmacology of local anesthetic preparations and the manner in which they alter the physiologic responses of neural tissues.

Assessment Method: Locally developed exams

Performance Criteria:

70% or higher achieved

Cardiovascular Drugs

Illustrate the mechanism of action of selected cardiovascular agents in the treatment therapy of congestive heart failure, hypertension, coronary artery disease and cardiac dysrhythmias.

Assessment Method: Locally developed exams

Performance Criteria:

70% or higher achieved

Pharmacokinetics and Dynamics

Differentiate the basic principles of pharmacokinetics from those of pharmacodynamics and illustrate the effects of these principles on the absorption, bioavailability and metabolism of a given drug.

Assessment Method: Locally developed exams

Performance Criteria:

70% or higher achieved

Outline:

Pharmacokinetics and Pharmacodynamics

Autonomic Nervous System and Autonomic Drugs

Pharmacology of Drug Categories Pertinent to the Practice of Dentistry