

Program: Pharmacology

Course Name: Pharmacology

Course Number: 500

Credits: 4

Course Directors: James L. Daniel, Ph.D., Room 328 OMS 2-4457

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Students may communicate by email or phone at any time.

The Course Director is available during the normal work day hours. Other instructors are available on the same terms.

Description: The goal of the course is to describe the mechanism of action, pharmacodynamics, pharmacokinetics, clinical use and adverse effects of drugs currently in use in the United States.

Textbook: Basic & Clinical Pharmacology 9th Edition (2004)

B.G. Katzung

or

Pharmacology and Therapeutics for Dentistry 5th Edition (2004)

J. Yagiela, E. Neidle and F. Dowd

Prerequisites: Biochemistry, Principles of Pharmacology, Principles of Physiology.

Disability Statement: Any student who has a need for accommodation based on a disability should contact the Course Director as soon as possible.

Times: The Course is offered in the Spring semester. The course will meet two days a week.

Syllabus

Week	Topic
1	Introduction General Principles I (Absorption, Distribution) General Principles II (Metabolism, Excretion) Mechanism of Drug Action
2	Pharmacokinetics Dose-Response Relationships Intro. To Autonomic Pharmacology Review Cholinergic Agonists Cholinergic Antagonists

- 3 Adrenergic Agonists
 Adrenergic Antagonists
 Review
 Skeletal Muscle Relaxants/
 Neuromuscular Blockers
 Drugs Used in Treatment of
 Parkinson's Disease
 Sedative - Hypnotics

- 4 Antipsychotic Drugs (Quiz)
 Antidepressant Drugs
 Anxiolytic Drugs
 Antiepileptics
 Local Anesthetics

- 5 General Anesthetics I - Principles
 General Anesthetics II
 Review
 EXAMINATION 1 (1.25 HOURS)
 Non-Opioid Analgesics & Antipyretics
 Antiinflammatory Agents

- 6 Opioid Analgesics I
 Opioid Analgesics II
 Drugs of Abuse I
 Drugs of Abuse II
 Alcohols

- 7 Review
 Diuretics I (Quiz)
 Diuretics II
 Antiarrhythmia Drugs
 Antianemia Drugs
 Antianginal Drugs

- 8 Antihypertensive Drugs
 Drugs Used In Congestive Heart Failure
 Lipid Lowering Drugs (Quiz)
 Hemostasis/Anticoagulants
 Histamine/Antihistaminics

- 9 Respiratory Pharmacology I:
 Antitussives & Xanthines
 Respiratory Pharmacology II:
 Bronchodilators

Review
EXAMINATION II (1.25 HOURS)
Treatment of Drug Overdose/Poisoning

- 10 **SPRING BREAK**
- 11 Drugs Used in Gastrointestinal Disease
Laxatives & Antidiarrheals
- Antimicrobial Drugs I
 Antimicrobial Drugs II
 Antimicrobial Drugs III
- 12 Antifungal Drugs
Antiviral Drugs
Review
Immunopharmacology
Anticaries/Antiplaque & Antigingivitis
Agents
Antiseptics/Disinfectants
- 13 Thyroid & Antithyroid Drugs (Quiz)
Calcium Homeostasis
Therapy for Diabetes Mellitus
Reproductive Hormones/Antagonists
Nutritional Pharmacology
- 14 Cancer Chemotherapy
Cancer Chemotherapy
Neonatal/Geriatrics
Prescription Writing
Review/Workshop
- 15 **FINAL EXAMINATION (2.5 HOURS)**