## EMPEROR'S COLLEGE MTOM COURSE SYLLABUS WESTERN PHARMACOLOGY

## COURSE DESCRIPTION

This course introduces the basic concepts and pharmacological principles of western pharmaceuticals and their major categories. Topics include pharmacological distribution, metabolism, and excretion, and the mechanisms by which drugs produce their therapeutic effects. Course emphasis is on general principles that can be applied broadly to groups or categories of medications. Students learn the major classes of drugs and specific examples within each class, potential drug-drug and drug-herb interactions.

## LEARNING OBJECTIVES

COURSE PREREQUISITIES

Pathophysiology I

REQUIRED TEXTS

Redmond (2000). Pharmacology Notebook. Unpublished manuscript.

#### RECOMMENDED TEXTS

## Nursing 2007 (2007) Nursing 2007, Drug Handbook. Springhouse PA.

Goodman and Gilman, The Pharmacological Basis of Therapeutics. Macmillan, New York 1975

#### COURSE REQUIREMENTS

Out-of-Class Work

To successfully complete the program, students need to plan studying a minimum of 2 hours out-of-class for each academic in-class hour; and half an hour out-of-class for each hour of clinical training.

10% Attendance45% Mid- Term45% Final

Classroom Lectures Represent The Instructor's Emphasis And Focus On Certain Aspects Of The Course Material. The Student Is Responsible For The Assigned Readings.

GRADING SCALE: 100-90% A, 89-80% B, 79-70% C, 69% and below F

### SPECIAL NOTES

**Professionalism and Full and Prompt Attendance:** To pass any course (separate from academic performance) all students must meet requirements for professionalism in coursework. Professionalism includes full and prompt attendance: Students who miss more than 2 class meetings in a 10-week course will earn an F in that course. Additionally, students who arrive more than 15 minutes to class or leave class before it ends will be marked tardy. Two tardies equal one absence. NOTE: Students who leave and return to class late from a break or leave during the class

Course Code 3 Units 30 Hours

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(especially if this is repeated) or who disrupt the class in other ways may be referred to the Academic Dean for professionalism.

CLASS ONE (The syllabus is subject to change at the discretion of the instructor.) Students Will Be Able To Describe General Principles Of Pharmacology, Including Basic Mechanisms Of Drug Action, Kinetics Of Drug Distribution, Drug Metabolism, Enzyme Induction, Pharmacogenetics, And Drug Safety And Effectiveness.

Assignments: Readings In Pharmacology Notebook

## CLASS TWO

Students will be able to describe the scheduling of controlled substances as well as the following types of controlled substances: analgesics/ narcotics, sedatives/ hypnotic stimulants, recreational drugs, muscle relaxants, and anesthetics.

Assignment: Readings In Pharmacology Notebook

## CLASS THREE

Students will be able to describe antimicrobial drugs, including antibiotics, antifungals, and antivirals.

Assignments: Readings In Pharmacology Notebook

## CLASS FOUR

Students will be able to describe cardiovascular drugs, including cardiotonics, anticholesteremics, antiarrhythmics, antihypertensives, and anticoagulants.

Assignments: Readings In <u>Pharmacology Notebook.</u> <u>Prepare for Midterm.</u>

#### CLASS FIVE Mid- Term Examination

#### CLASS SIX

Students will be able to describe renal functioning, including electrolyte metabolism and nephrotoxicity, and diuretics, and will be able to describe drug interventions for the sympathetic and parasympathetic aspects of the autonomic nervous system.

Assignments: Readings In Pharmacology Notebook

#### CLASS SEVEN

Students will be able to describe drugs used for gastrointestinal disorders, including antacids, H2 blockers, laxatives, cathartics, antidiarrheals, and antiemetics.

Assignments: Readings In Pharmacology Notebook

#### CLASS EIGHT

Students will be able to describe pharmacological interventions for diabetes mellitus, including insulin and oral hypoglycemics, and other major hormonal interventions for the thyroid, estrogen/ progesterone/ BCP, and

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corticosteroids.

Assignments: Readings In Pharmacology Notebook

## CLASS NINE

Students will be able to describe drugs influencing neurotransmitters, including antipsychotics, antidepressants, antianxiety agents, anticonvulsants, and antiparkinsonian agents.

Assignments: Readings In Pharmacology Notebook

#### CLASS TEN

Students will be able to describe common theories for the causes of cancer and chemotherapeutics for neoplastic disease.

Assignments: Readings In Pharmacology Notebook

CLASS ELEVEN Final Examination

REFERENCE MATERIAL

FACULTY INFO

Please check with instructor during class to get updated contact info.