# **Master Syllabus**

# **RET 1124 - Cardiopulmonary Pharmacology**

**Division:** Health Sciences **Department:** Respiratory Care

Credit Hour Total: 2.0 Lecture Hrs: 2.0

Prerequisite(s): CHE 1111

Other Prerequisite(s): AND Restricted to Majors

Date Revised: October 2012

## **Course Description:**

Actions, effects, dosages and indications for drug classes commonly used to treat pulmonary and cardiovascular diseases.

### **General Education Outcomes:**

□ Critical Thinking/Problem Solving Competency

#### **Course Outcomes:**

#### Autonomic nervous system agents

Identify and describe the principles of pharmacokinetics and dynamics including the function of the autonomic nervous system and the mechanism of action for adrenergic and cholinergic drugs.

Assessment Method: Locally developed exams Performance Criteria: 75% score or higher

#### Respiratory drugs and dosage calculations

Identify indications, contraindications and effects for various respiratory drugs and calculate appropriate dosages.

**Assessment Method:** Locally developed exams **Performance Criteria:** 75% score or higher

### Cardiovascular drugs

Discuss the actions and effects of various cardiovascular agents.

Assessment Method: Locally developed exams Performance Criteria: 75% score or higher

### Miscellaneous drugs used in critical care

Discuss the actions and effects of anti-inflammatory, antimicrobial, analgesic, sedatives, anesthesia and neuromuscular blockade agents.

Assessment Method: Locally developed exams Performance Criteria: 75% score or higher

#### **Outline:**

Pharmacokinetics and Dynamics with Dosage Calculations

Autonomic Nervous System with Cholinergic/Anticholinergic and Adrenergic/Antiadrenergic Categories

Beta Adrenergic Bronchodilators and Xanthines

Miscellaneous Agents including Smoking Cessation Agents, Mucolytics, Surfactant, and Agents used to Treat Asthma, Pulmonary Disease and Viral/Protozoal Infections

Cardiovascular Pharmacology

Anti-inflammatory, Antimicrobial and Analgesic Agents including Local and General Anesthesia Agents Neuromuscular Blockade