

# University of Th-Qar College of Nursing Undergraduate Program

# Pharmacology For Nursing /I

1. Course title: pharmacology for nursing

**2. Course Number:** (304)

**3. Credit Hours:** (2) credits

**4. Course calendar:** (2) hours weekly of (15) weeks

**5. Placement:** Third year / First semester

**6.** Course Description:

This course is designed to assist 3<sup>rd</sup> year students to acquire the basic knowledge relevant to the commonly used therapeutic drugs for body systems, and according to the causative agent of the disease. It provides the opportunity to the students to deal with different component of the drugs taking in consideration the nurses, responsibility in the process of drug administration.

#### 7. Course Goals:

## By the end of the semester, the students will be able to:

- 1. Differentiate between various drugs forms.
- 2. Understand the essential information concerning different types of drugs, such as mechanism of action does side effect and methods of administration.
- 3. Recognize the responsibility of the nurse in giving drugs through the therapeutic process.
- 4. Realize different types of drug therapy across the life span.
- 5. Identify the essential principles in administration of medications.
- 6. Recognize drugs acting on common diseases.

#### **8. Course Outline:**

# 1. Part I : Introduction to Pharmacology and the History of drugs

- 1.1. Origin of Pharmacology words and the History of drugs.
- 1.2. Medical uses for the drugs.
- 1.3. Sources of drugs.
- 1.4. Drug Names.
- 1.5. Properties of ideal drug
- 1.6. Factors that determine the intensity of drug action.
- 1.7. Over the counter drug (OTC)
- 1.8. Basic terms.

## Part II: pharmacology and the nursing process

- 2.1. What are the responsibilities of Nurse regarding drugs?
- 2.2. Review of the nursing process
- 2.3. Application of the nursing process in the drug therapy

#### Part III: basic principles of pharmacology

- 3.1. pharmacokinetics
- 3.2. pharmacodynamics: Dose response relationships
- 3.3. Drug reactions
- 3.4. Drug interactions
- 3.5. Individual variation in drug responses

# Part IV: Drug therapy across the life span

- 4.1. Drug therapy during pregnancy and breast feeding
- 4.2. Drug therapy in paediatric patents
- 4.3. Drug therapy in geriatrics patents

# Part V: The administration Of Drugs

- 5.1. The six rights of drug administration
- 5.2. Drugs forms.
- 5.3. The administration Of Drugs by oral and parenteral rout, and the Nursing Responsibilities.
- 5.4. Administration of drug by (Topics, Trandermal, Inhalation, sublingual and buccal, Nasal, vaginal, Rectal.
- 5.5. Other route of administration:

- 5.6. A. Intra arterial route
- 5.7. B. Intra- articular route
- 5.8.C. Intra-cordial route
- 5.9. Medication errors.
  - 5.10. Glossary of abbreviations, short forms, symbols and their meanings.

## Part VI: Basic principle of Neuro-pharmacology

- 6.1. Physiology of the peripheral nerves System
- 6.2. Cholinergic drugs: Muscarnic agonists and antagonists.
- 6.3. Adrenergic Agonists
- 6.4. Adrenergic Antagonists

#### **Part VII: Midterm Examination**

## Part VIII: Introduction to Central Nervous System Pharmacology

- 8.1.Drugs for Parkinson's Disease
- 8.2.Drugs For Epilepsy
- 8.3. Alzheimer's disease
- 8.4. Antidepressants
- 8.5.Benzodiazepines and other Drugs for Anxiety and Insomnia

## Part IX: Drug abuse

- 9.1.Basic considerations
- 9.2.Drug abuse (Alcohol, Opioids, Psycho stimulants, Depressants, Marijuana, PCP, Nicotine)

## Part X: Drug Affecting on the Cardiovascular System

- 10.1.Anti hypertensive drugs
- 10.2.Drugs For heart Failure
- 10.3.Drugs for Angina Pectoris
- 10.4.management of Myocardial infarction
- 10.5.Anti-arrhythmic drugs

#### Part XI: Midterm Examination

## Part XII: Drugs used in the treatment of dyslipidemia

- 12.1.HMG COA reductive inhibitors a torvastatin (lipitor)
- 12.2.Bile acid resins (cholestyramine)
- 12.3. Fibric acid gents (Fibrates).
- 12.4. Cholesterol absorption inhibitors

## Part XIII: Anti -Coagulant, anti-platelet and thrombolytic drugs

- 13.1.Parenteral Anticoagulants heparin(heplock)
- 13.2.Oral Anticoagulants Warfarin (Coumadin)
- 13.3. Antiplatelet Agents
- 13.4.ADP Receptor Blockers (clopidogrel)
- 13.5. Thrombolytics (alteplae)
- 13.6.Hemostatics (aminocaoroic acid)

## PartX IV: Drugs used for deficiency anaemia

- 14.1.Iron deficiency.
- 14.2. Vitamin B12 deficiency.
- 14.3. Folic acid deficiency.
- 14.4. Nursing considerations.