



Para- Medical Program

Specialization	Nursing
Course Number	020802141
Course Title	Pharmacology
Credit Hours	2
Theoretical Hours	2
Practical hours	0

Course description:

This course is designed to provide students with general information and description of the important drugs which are related to a particular system of human body or to an aspect of medical care. Pharmacokinetics of different classes of drugs, legal responsibilities, and safe drug administration are explored as well.

Course objectives :

Intended Learning Outcomes

Upon the completion of this course the student will be able to:

A. Knowledge & Understanding

1. acquire the knowledge of the general principles of pharmacology that will enable the student to assist in administering medications properly and safely in nursing practice.
2. To be familiar with the therapeutic indications, and contraindications of drugs commonly used in clinical practice.
3. identify the most common examples of the most widely used drugs from each class.

B. Intellectual skills

1. Describe and define the basic terms and concepts of pharmacology
2. relate the type of the medication to the disorder being treated.

C. Subject specific skills

1. Identify the roles of the professional nurse in relation to medication administration and education

D. Transferable skills

1. Utilize the nursing process and to assess appropriate/inappropriate responses to therapy.
2. teaching patients regarding their given medications.

Course outline:

Unit No.	Unit name	Unit Content	Time Needed
1	General principles of pharmacology	<ul style="list-style-type: none"> • what is pharmacology • Pharmacokinetics (absorption, metabolism and elimination of drugs) • Pharmacodynamics • Routes of drug administration • medications Classes and names • prescription and non-prescription drugs • factors that modify client's response to drugs • The role of nurses in drug administration. 	8
2	Pharmacology of the central and autonomic nervous systems	<ul style="list-style-type: none"> • Cholinergic agents and anticholinergics. • Adrenergic and Adrenergic blockers. • Dopaminergic agents 	6
		<ul style="list-style-type: none"> • Sedative – hypnotics • Opioid agonists and antagonists • Anticonvulsants. • Anti-Parkinsonian agents. 	6
3	Pharmacology of the cardiovascular system	<ul style="list-style-type: none"> • Cardiac glycosides. • Antiarrhythmic drugs. • Antihypertensive drugs. • Drugs used in the management of angina pectoris (nitrates, calcium channel blockers, beta blockers) • Diuretics. 	8
		Anticoagulants	3
4	Pharmacology of the endocrine system	<ul style="list-style-type: none"> • Pituitary hormones. • Drugs used in the management of thyroid diseases. • Glucocorticoids. • Sex steroids and oral contraceptives. • Insulin and oral hypoglycemic agents. 	8
5	Respiratory Pharmacology	<ul style="list-style-type: none"> • cough remedies. • Drugs used in the treatment of bronchial asthma. 	4
6	Pharmacology of the gastrointestinal tract	<ul style="list-style-type: none"> Drug therapy of peptic ulcer. • Histamine and antihistamines • proton pump inhibitors Drugs used in the treatment of constipation. 	4
7	Analgesics	<ul style="list-style-type: none"> Nonsteroidal anti-inflammatory drugs: <ul style="list-style-type: none"> - Salicylic acid derivatives. - Acetaminophen and other agents. • Drug therapy of gout 	6



Method of teaching

Lectures , Discussion, Presentation. Videos, animations

Exams and method of evaluation:

According to the study instructions

References:

1. Manceno, Gallagher, (2014). Frequently prescribed medications. Jones & Bartlett
2. Smith, B. (2016) Pharmacology For Nurses . Jones & Bartlett
3. Karch, A. (2016). Focus on Nursing Pharmacology , (7th Ed.), Lippincott and wilkins
4. Sheridan, E. (2008). Falconer's the Drug, the Nurse, the Patient, W B Saunders Co