REPUBLIC OF YEMEN UNIVERSITY OF SCIENCE & TECHNOLOGY

Administration of Quality Assurance and Accreditation





Course Syllabus of Introduction to Pharmacology

Faculty: Medicine and Health Sciences

Department: Health Sciences

Program: Bachelor in Radiologic Technology & Medical Imaging

I. General informa	ation about the course instruc	tor:					
Name	Mohammed Battah	Office Hours(3 Hours Weekly)					
Location & phone number	2nd floor	Sat	Sun	Mon	Tue	Wed	Thu
Email	m.albattah@ust.edu				1		2

I	II. General information about the course:						
1.	Course Title :	Introduction to Pharmacology					
2.	Course Code and Number :	BMI 224					
		Credit Hours					
3.	Credit Hours:	Theoretical	Seminar/Tutorial	Practical	Training	Total	
		1	-	-	_	1	
4.	Study Level and Semester:	2 nd level /2 nd semester					
5.	Pre-requisites:	None					
6.	Co-requisites:	None					
7.	Program in which the course is offered:	Bachelor in Radiologic Technology & Medical Imaging					
8.	Teaching Language:	English					
9.	Instruction location:	University of Sci	ence and Technology	, Sana'a, Yem	ien		

عميد الكلية:

رئيس القسيم: د. عبدالحبيب العباولي 11/ Y

المراجع : د. بثينة العمراني م د. مجاهد نصار (

الموصف: د. محمد بطاح

III. Course Description

This course aimed to provide students with the important guidelines in general pharmacology, emergency drugs, chemo & radio therapy, sedative & hypnotic drugs as well as the different types of contrast media. This course will be taught through lecture, collaborative learning, self-learning discussion and assignment. The students will be evaluated through report, written exam and Assignment evaluation.

IV. Course Aims: This course aims to make students able to:

- 1. Introduce the students to the basic sciences of drugs and pharmacology
- 2. Assist students to choose the suitable contrast media, routs of administration for medical imaging, and how they deal with premedication side effects.
- 3. Enable students to differentiate between different types of radiation therapy, antimicrobials, analgesics and emergency drugs.

V. Course Intended Learning Outcomes (CILOs):

After completing this course, students would be able to:

- 1. Match the suitable contrast media with the safety procedures used for medical imaging
- 2. Classify the sedative and hypnotic drugs and their effects on psychosocial disorders.
- 3. Choose the suitable drugs used for emergency, as analgesics and antimicrobials when necessary in the medical imaging departments
- 4. Design the proper therapy plan of contrast media, radiation therapy and analgesic drugs based on QA standards.
- 5. Apply the appropriate contrast media, deal with premedication side effects, and the suitable rout of administration.
- 6. Review the suitable rout of drug administration for medical imaging.
- 7. Evaluate required learning resources by using libraries and internet.

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VI. Course Content

First: Theoretical Aspects

No.	Course Topics/Units	Sub-topics	Week due	Contact Hours
1	Introduction: Pharmacokinetics	 Absorption Bioavailability Distribution Metabolism Excretion Half life 	1 st - 2 ^{ed}	2
2	Introduction: Pharmacodynamics	- Drug receptors - Adverse effect	3 rd - 4 th	2
3	Route of drug administration	- Dosage form - Route of drug administration, Advantages and disadvantages	5 th	1
4	Drug classifications	 Drug classifications: Therapeutic and Pharmacological Drug naming Indication and contraindication 	6 th	1
5	Midterm Exam.		7^{th}	1
6	Anti-microbial agents	Introduction, Antibacterial agents, antifungal and antiviral	8 th - 9 th	1
7	Contrast media	-Pharmacology uses and side effects of: X-ray contrast, and MRI - Post contrast media SE, Premedication - Radiographic and Radiopaque imaging contrast agents	10 th - 11 th	2
8	Emergency Drugs	- MOA, uses and SE of the drug used in emergency	12 th	1
9	Anxiety and Phobia	- MOA, uses, SE of Anxiety, Phobia drugs	13 th	1
10	Analgesics and Opioids	- MOA, uses and SE of NSAIDs and opioids	14 th	1
11	Chemo & Radio therapy	- Types, MOA, uses and SE of chemo and radiotherapy	15 th	1
12	Final exam.		16 th	1
		Total	16	16

المراجع : د. بثینه العمرانی د. مجاهد نصار

الموصف: د. محمد بطاح