Ministry of Higher Education and Scientific Research Scientific Supervision and Scientific Evaluation Apparatus Directorate of Quality Assurance and Academic Accreditation
Accreditation Department

Academic Program and Course Description Guide

2024

Introduction:

The educational program is a well—planned set of courses that include procedures and experiences arranged in the form of an academic syllabus. Its main goal is to improve and build graduates' skills so they are ready for the job market. The program is reviewed and evaluated every year through internal or external audit procedures and programs like the External Examiner Program.

The academic program description is a short summary of the program's main features and courses. It shows what skills students are working to develop based on the program's goals. This description is very important because it is the main part of getting the program accredited, and it is written by the teaching staff under the supervision of scientific committees in the scientific departments.

This guide, in its second version, includes a description of the academic program after updating the subjects and paragraphs of the previous guide in light of the updates and developments of the educational system in Iraq, which included the description of the academic program in its traditional form (annual, quarterly), as well as the adoption of the academic program description circulated according to the letter of the Department of Studies T 3/2906 on 3/5/2023 regarding the programs that adopt the Bologna Process as the basis for their work.

In this regard, we can only emphasize the importance of writing academic programs and course descriptions to ensure the proper functioning of the educational process.

Concepts and terminology:

Academic Program Description: The academic program description provides a brief summary of its vision, mission, and objectives, including an accurate description of the targeted learning outcomes according to specific learning strategies.

Course Description: Provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the students to achieve, proving whether they have made the most of the available learning opportunities. It is derived from the program description.

Program Vision: An ambitious picture of the future of the academic program that is sophisticated, inspiring, stimulating, realistic, and applicable.

Program Mission: Briefly outlines the objectives and activities necessary to achieve them and defines the program's development paths and directions.

Program Objectives: Program Objectives are statements that describe what the academic program intends to achieve within a specific period of time and are measurable and observable.

Curriculum Structure: All courses/subjects included in the academic program according to the approved learning system (quarterly, annual, Bologna Process) whether it is a requirement (ministry, university, college and scientific department) with the number of credit hours.

Learning Outcomes: **A** compatible set of knowledge, skills, and values acquired by students after successfully completing the academic program. The learning outcomes of each course must be determined in a way that achieves the program's objectives.

Teaching and learning strategies: These are the strategies used by the faculty members to develop students' teaching and learning. They are plans that are followed to reach the learning goals. They describe all classroom and extracurricular activities that achieve the program's learning outcomes.

Academic Program Description Form

University Name: Tikrit University

Faculty/Institute: College of Pharmacy

Scientific Department: Pharmacology and Toxicology

Academic or Professional Program Name: Pharmaceutical Sciences

Final Certificate Name: BSc in pharmacy science

Academic System: Semesters **(Two semesters/year)**

Description Preparation Date: 01/03/2024

File Completion Date: 22/03/2024

Signature:

Head of Department Name:

Assist. Prof. Dr. Khalid S. Saleh

Date: 25/03/2024

Signature:

Scientific Associate Name:

Lect. Dr. Ali Hussain Abbas

Date: 25/03/2024

The file is checked by:

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Nashwan Ahmed Sumait

Date: 25/03/2024

Signature:

Approval of the Dean

Lect. Dr. Ali Hussain Abbas

Program Skills Outline															
				Required program Learning outcomes											
Year/ Level	Course Code	Course Name	Basic or optional	Knowledge				Skills				Ethics			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
1st	116	Terminology	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2nd	214	Medical physiology I	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2nd	229	Medical physiology II	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3rd	327	Pharmacology I	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4th	411	Pharmacology II	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4th	426	Pharmacology III	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4th	429	General toxicology	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5th	516	Clinical toxicology	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

- **Please tick the boxes corresponding to the individual program learning outcomes under evaluation.**

Course Description Form

1. Course Name:
Pharmacology I
2. Course Code:
327
3. Semester / Year:
2nd Semester / Year 3
4. Description Preparation Date:
2023-2024
5. Available Attendance Forms:
Yes
6. Number of Credit Hours (Total) / Number of Units (Total)
3 Credits
7. Course administrator's name (mention all, if more than one name)
Name: Sinan Al-Mahmood, Email: sinanpharmacy@tu.edu.iq
8. Course Objectives

Course Objectives	Provides students with principles of pharmacokinetics and pharmacodynamics in wellness promotion and illness prevention and treatment. Express knowledge of pharmacological agents concerning classifications, mechanism of action, routes of administration, doses, and adverse effects, precautions, contraindications & drug-drug interactions.
9. Teaching and Learning Strategies	
Strategy Learning outcome (LO)	• Explain the pharmacological actions of medications on the human body. • Identify the legal, ethical and cultural implications of medications. • Demonstrate the ability to provide important information regarding the adverse drug reactions, administration of drug, drug-drug and drug-nutrient interactions.

10. Course structure					
week	**Hours**	**Require learning outcomes**	**Unit or subject name**	**Learning method**	**Evaluation methods**
1&2	2 4	General introduction to pharmacology, Pharmacokinetics.	I	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
3&4	4 2	Pharmacodynamics, The Autonomic Nervous System.	I II	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
5&6	6	Cholinergic system.	II	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
7&8	6	Adrenergic system.	II	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
9	2	Principles of Antimicrobial Therapy.	VI	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
10	4	Cell Wall Inhibitors.	VI	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
11	4	Protein Synthesis Inhibitors.	VI	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
12	3	Quinolones, Folic Acid Antagonists, and Urinary Tract Antiseptics.	VI	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
13	2	Antimycobacteria Drugs.	VI	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
14	2	Antifungal.	VI	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
14	1	Antiprotozoal.	VI	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
15	2	Anthelmintic Drugs.	VI	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
15	1	Antiviral.	VI	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
Total		**45 hrs**			

11. Course evaluation				
LO	**Method**	**Mid**	**Final**	**Total**
1, 2& 3	Written test	MCQ T&F Matching MEQ 15%	MCQ MEQ	70%
1, 2& 3	Practical	20%		
1, 2& 3	Written test	Quiz, MCQ SAQ 5%		10%
Total		40%	60%	100%

12. Learning and teaching resources

Required:

- Whalen, K., Finkel, R. & Panavelil, T. A. (2018). Lippincott Illustrated Reviews: Pharmacology (7th ed.). China: Wolters Kluwer

Additional references supporting the course

Recommended

- Katzung, B., Trevor, A. (2014). Basic and Clinical Pharmacology (13th ed.). New York: McGraw-Hill Education.
- Toy, E., Loose, D., Tischkau, S. A. & Pillai, A. S., (2014). Case files pharmacology (3rd ed.). New York: McGraw-Hill Education.

Prepared by:	Checked by:	Approved by:
Dr. Sinan Mohammed Abdullah Al-Mahmood		

Course Description Form

1. Course Name:
Pharmacology II
2. Course Code:
411
3. Semester / Year:
1st Semester / Year 4
4. Description Preparation Date:
2023-2024
5. Available Attendance Forms:
Yes
6. Number of Credit Hours (Total) / Number of Units (Total)
4 Credits
7. Course administrator's name (mention all, if more than one name)
Name: Sinan Al-Mahmood, Email: sinanpharmacy@tu.edu.iq
8. Course Objectives

Course Objectives	To introduce the pharmacy students to the general pharmacology of the central nervous system and to the various drug groups used in the treatment of CNS diseases or drugs altering its function. The student will be introduced to the various drugs used in the management of cardiovascular diseases. Moreover, the course will cover the drugs affecting the gastrointestinal and respiratory systems.
9. Teaching and Learning Strategies	
Strategy Learning outcome (LO)	• Explain the pharmacological actions of medications on the human body. • Identify the legal, ethical and cultural implications of medications. • Demonstrate the ability to provide important information regarding the adverse drug reactions, administration of drug, drug-drug and drug-nutrient interactions.

10. Course structure					
week	**Hours**	**Require learning outcomes**	**Unit or subject name**	**Learning method**	**Evaluation methods**
1	2	Introduction to CNS pharmacology.	III	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
1	2	CNS stimulants.	III	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
2	3	Anxiolytic and Hypnotic drugs.	III	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
3	3	General and Local Anesthetics.	III	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
4	3	Antidepressant drugs.	III	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
5	3	Antipsychotic (neuroleptic) drugs.	III	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
6	3	Opioid analgesics and antagonists.	III	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
7	3	Treatment of neurodegenerative diseases.	III	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
8	2	Antiepileptic Drugs.	III	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
9	2	Diuretics.	IV	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
10	2	The treatment of heart failure (HF).	IV	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
10	2	Antiarrhythmic drugs.	IV	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
11	2	Antianginal Drugs.	IV	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
12	3	Antihypertensive drugs.	IV	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
13	3	Drugs affecting the blood.	IV	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
14	2	Antihyperlipidemic drugs.	IV	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
14	2	Gastrointestinal and antiemetic drugs.	VII	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
15	3	Drugs acting on the respiratory system.	VII	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
Total		**45 hrs**			

11. Course evaluation				
LO	**Method**	**Mid**	**Final**	**Total**
1, 2& 3	Written test	MCQ T&F Matching MEQ 20%	MCQ MEQ	70%
1, 2& 3	Written test	Quiz, MCQ SAQ 10%		10%
Total		30%	70%	100%

12. Learning and teaching resources

Required:

- Whalen, K., Finkel, R. & Panavelil, T. A. (2018). Lippincott Illustrated Reviews: Pharmacology (7th ed.). China: Wolters Kluwer

Additional references supporting the course

Recommended

- Katzung, B., Trevor, A. (2014). Basic and Clinical Pharmacology (13th ed.). New York: McGraw-Hill Education.
- Toy, E., Loose, D., Tischkau, S. A. & Pillai, A. S., (2014). Case files pharmacology (3rd ed.). New York: McGraw-Hill Education.

Prepared by:	Checked by:	Approved by:
Dr. Sinan Mohammed Abdullah Al-Mahmood		

Course Description Form

1. Course Name:
Pharmacology III
2. Course Code:
426
3. Semester / Year:
2nd Semester / Year 4
4. Description Preparation Date:
2023-2024
5. Available Attendance Forms:
Yes
6. Number of Credit Hours (Total) / Number of Units (Total)
2 Credits
7. Course administrator's name (mention all, if more than one name)
Name: Sinan Al-Mahmood, Email: sinanpharmacy@tu.edu.iq

8. Course Objectives

Course Objectives	To introduce the pharmacy students to various drug groups affecting endocrine systems and their use in correcting abnormalities in the endocrine functions. Moreover, the course will cover the drugs used in the management of neoplastic diseases, bone disorders, obesity and erectile dysfunction. Inflammatory agents and the anti-inflammatory drugs will also be covered during this course.

9. Teaching and Learning Strategies

Strategy Learning outcome (LO)	• Explain the pharmacological actions of medications on the human body. • Identify the legal, ethical and cultural implications of medications. • Demonstrate the ability to provide important information regarding the adverse drug reactions, administration of drug, drug-drug and drug-nutrient interactions.

10. Course structure					
week	**Hours**	**Require learning outcomes**	**Unit or subject name**	**Learning method**	**Evaluation methods**
1&2	3	Hormones of the pituitary and thyroid glands.	V	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
2&3	4	Insulin and oral hypoglycemic drugs.	V	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
4&5	3	Adreno-corticosteroids.	V	A Theoretical lesson using PowerP Autacoids and autacoid antagonists oint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
5&6	3	The gonadal hormones and inhibitors.	V	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
7&8	3	Autacoids and autacoid antagonists	VII	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
8&9	3	Non-steroidal anti-inflammatory drugs (NSAIDs) and other anti- inflammatory agents.	VII	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
10	2	Drugs used in erectile dysfunction.	VII	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
11	2	Drugs used in osteoporosis.	VII	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
12	2	Drugs used in the management of obesity.	VII	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
13,14 &15	5	Cancer Chemotherapy: Anticancer drugs and immunosuppressants.	VI	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
Total		**45 hrs**			

11. Course evaluation				
LO	**Method**	**Mid**	**Final**	**Total**
1, 2& 3	Written test	MCQ T&F Matching MEQ 20%	MCQ MEQ	70%
1, 2& 3	Written test	10 Quiz, MCQ SAQ 10%		10%
Total		30%	70%	100%

12. Learning and teaching resources

Required:

- Whalen, K., Finkel, R. & Panavelil, T. A. (2018). Lippincott Illustrated Reviews: Pharmacology (7th ed.). China: Wolters Kluwer

Additional references supporting the course

Recommended

- Katzung, B., Trevor, A. (2014). Basic and Clinical Pharmacology (13th ed.). New York: McGraw-Hill Education.
- Toy, E., Loose, D., Tischkau, S. A. & Pillai, A. S., (2014). Case files pharmacology (3rd ed.). New York: McGraw-Hill Education.

Prepared by:	Checked by:	Approved by:
Dr. Sinan Mohammed Abdullah Al-Mahmood		

Course Description Form

1. Course Name:
Medical Terminology
2. Course Code:
116
3. Semester / Year:
1st semester / Year 1
4. Description Preparation Date:
2023-2024
5. Available Attendance Forms:
Yes
6. Number of Credit Hours (Total) / Number of Units (Total)
1 Credit
7. Course administrator's name (mention all, if more than one name)
Name: Email:
8. Course Objectives

Course Objectives	In this course, students will learn to pronounce, spell, and define medical and pharmaceutical terms used in healthcare settings. It will use a word-building strategy that helps them discover connections and relationships among word roots, prefixes, and suffixes. They will learn the meaning of each part of a complex medical and pharmaceutical term and be able to put the parts together and define the term.
9. Teaching and Learning Strategies	
Strategy Learning outcome (LO)	• Explain the pharmaceutical and medical terms used during the study. • Preparing the student and making him familiar with all kinds of medical terms used in his medical field. • Demonstrate the ability to provide important information regarding the terms that describe adverse drug reactions, administration of drugs, drug-drug interactions, and drug-nutrient interactions.

10. Course structure					
week	**Hours**	**Require learning outcomes**	**Unit or subject name**	**Learning method**	**Evaluation methods**
1	1	Basic word roots and common suffixes	Basic word roots and common suffixes	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
2	1	More word roots, suffixes and prefixes related to pharmaceutical sciences (pharmacognosy, clinical pharmacy, pharmaceutics,…etc)	More word roots, suffixes and prefixes related to pharmaceutical sciences (pharmacognosy, clinical pharmacy, pharmaceutics, …etc)	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
3,4	2	Basic anatomical terms and abnormal conditions	Basic anatomical terms and abnormal conditions	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
5	1	The genitals and urinary tract	The genitals and urinary tract	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
6	1	The gastrointestinal tract	The gastrointestinal tract	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
7	1	The heart and cardiovascular system	The heart and cardiovascular system	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
8,9	2	Symptoms, diagnoses, treatments, communication qualifiers, and statistics	Symptoms, diagnoses, treatments, communication qualifiers, and statistics	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
10	1	Growth and development, and body orientation	Growth and development, and body orientation	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
11	1	Gynecology, pregnancy, and childbirth	Gynecology, pregnancy, and childbirth	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
12	1	The eye and the respiratory tract	The eye and the respiratory tract	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
13,14	2	The nervous system and behavioral disorders	The nervous system and behavioral disorders	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
15	1	Blood and immunity	Blood and immunity	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
Total		**15 hrs**			

11. Course evaluation				
LO	**Method**	**Mid**	**Final**	**Total**
1, 2& 3	Written test	MCQ, T&F, Matching Essay 20%	MCQ, T&F, Matching Essay	70%
1, 2& 3	Written test	Quiz, MCQ & SAQ 10%		10%
Total		30%	70%	100%

12. Learning and teaching resources

Required:

John and Liz Soars, New Headway Plus, Oxford: Oxford

Additional references supporting the course

Recommended

- Medical Terminology for Beginners 2023: The Ultimate Study Guide to Memorize and Understand Medical Terms for a Brilliant Health Care Career.
- Introduction to Medical Terminology, 2nd Edition.

Prepared by:	Checked by:	Approved by:

Course Description Form

1. Course Name:
Physiology I
2. Course Code:
214
3. Semester / Year:
1st / Year 2
4. Description Preparation Date:
2023-2024
5. Available Attendance Forms:
Yes
6. Number of Credit Hours (Total) / Number of Units (Total)
4 Credits
7. Course administrator's name (mention all, if more than one name)
Name: Email:
8. Course Objectives

Course Objectives	To enable students understanding the basic principles of physiological functions of different tissues and organs of the human being, and how to evaluate these functions and correlate them with the normal and abnormal conditions. It also emphasizes on the role of homeostatic and hemodynamic changes in the integration of physiological status.
9. Teaching and Learning Strategies	
Strategy Learning outcome (LO)	• Knowledge and understanding of the physiology of the body cell is the basis for the work of various body systems. • Understand the physiology of the various body systems. • The student's knowledge of the physiology of the body and the functions of the various organs in the body.

10. Course structure					
week	**Hours**	**Require learning outcomes**	**Unit or subject name**	**Learning method**	**Evaluation methods**
1-2	5	The general and cellular basis of medical physiology.	The general and cellular basis of medical physiology.	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
3-7	16	Physiology of nerves and muscles.	Physiology of nerves and muscles.	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
8-9	8	Respiratory system Physiology.	Respiratory system Physiology.	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
10-12	8	Renal system Physiology.	Renal system Physiology.	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
13-15	8	Cardiovascular system Physiology.	Cardiovascular system Physiology.	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
Total		**45 hrs**			

11. Course evaluation				
LO	**Method**	**Mid**	**Final**	**Total**
1, 2& 3	Written test	MCQ, T&F Matching, MEQ, Essay. 15%	MCQ, Essay.	70%
1, 2& 3	Practical	20%		
1, 2& 3	Written test	Quiz, MCQ SAQ 5%		10%
Total		40%	60%	100%

12. Learning and teaching resources

Required:

Textbook of Medical Physiology by Guyton AC; latest edition.

Additional references supporting the course

Recommended

2nd Edition, Essentials of Human Physiology for Pharmacy by Laurie Kelly McCorry Copyright 2008.

Prepared by:	Checked by:	Approved by:

Course Description Form

1. Course Name:
Physiology II
2. Course Code:
229
3. Semester / Year:
2nd Semester / Year 2
4. Description Preparation Date:
2023-2024
5. Available Attendance Forms:
Yes
6. Number of Credit Hours (Total) / Number of Units (Total)
4 Credits
7. Course administrator's name (mention all, if more than one name)
Name: Email:
8. Course Objectives

Course Objectives	To enable students understanding the basic principles of physiological functions of different tissues and organs of the human being, and how to evaluate these functions and correlate them with the normal and abnormal conditions. It also emphasizes on the role of homeostatic and hemodynamic changes in the integration of physiological status.
9. Teaching and Learning Strategies	
Strategy Learning outcome (LO)	• Knowledge and understanding of the physiology of the body cell is the basis for the work of various body systems. • Understand the physiology of the various body systems. • The student's knowledge of the physiology of the body and the functions of the various organs in the body.

10. Course structure					
week	**Hours**	**Require learning outcomes**	**Unit or subject name**	**Learning method**	**Evaluation methods**
1-3	10	Gastrointestinal Physiology.	Gastrointestinal Physiology.	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
4-8	15	Circulatory body fluid.	Circulatory body fluid.	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
9-15	20	Endocrinology Physiology.	Endocrinology Physiology.	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
Total		**45 hrs**			

11. Course evaluation				
LO	**Method**	**Mid**	**Final**	**Total**
1, 2& 3	Written test	MCQ, T&F, Matching , MEQ Essay. 15%	MCQ, , Essay.	70%
1, 2& 3	Practical	20%		
1, 2& 3	Written test	Quiz, MCQ, SAQ 5%		10%
Total		40%	60%	100%

12. Learning and teaching resources

Required:

Textbook of Medical Physiology by Guyton AC; latest edition.

Additional references supporting the course

Recommended

2nd Edition, Essentials of Human Physiology for Pharmacy by Laurie Kelly McCorry Copyright 2008.

Prepared by:	**Checked by:**	**Approved by:**

Course Description Form

1. Course Name:
General toxicology
2. Course Code:
429
3. Semester / Year:
2nd Semester / Year 4
4. Description Preparation Date:
2023-2024
5. Available Attendance Forms:
Yes
6. Number of Credit Hours (Total) / Number of Units (Total)
3 Credits
7. Course administrator's name (mention all, if more than one name)
Name: Email:
8. Course Objectives

Course Objectives	Studying the principle of exposure to different chemicals and environmental factors, their sources, mechanisms of toxicity and their risk to human beings enables students to understand the required measures to protect living organisms against suspected toxic hazards.
9. Teaching and Learning Strategies	
Strategy Learning outcome (LO)	• Students' knowledge of poisoning and the mechanism of its occurrence. • Students' knowledge of children's poisoning - and geriatric patients • Familiarity with cases of drug poisoning of the circulatory system and knowing the toxicity of plants and herbal preparations

10. Course structure					
week	**Hours**	**Require learning outcomes**	**Unit or subject name**	**Learning method**	**Evaluation methods**
	3	Introduction: general consideration; host factor, environmental factors of toxic effects.	Introduction: general consideration; host factor, environmental factors of toxic effects.	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
	3	Carcinogenesis	Carcinogenesis	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
	1	Mutagenesis	Mutagenesis	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
	16	Target organs and systemic toxicology; Respiratory system, Liver, Kidney, Skin, Nervous system, cardiovascular system, Blood.	Target organs and systemic toxicology; Respiratory system, Liver, Kidney, Skin, Nervous system, cardiovascular system, Blood.	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
	15	Toxic substances: Food additive and contaminants, Pesticides, Metals, Radiation and radioactive materials, plants, Solvents,	Toxic substances: Food additive and contaminants, Pesticides, Metals, Radiation and radioactive materials, plants, Solvents,	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
	7	Environmental toxicology: Air pollution, water and soil pollutants, Gases (Tear gas, Pepper spray), CO, Cyanide(H2S).	Environmental toxicology: Air pollution, water and soil pollutants, Gases (Tear gas, Pepper spray), CO, Cyanide(H2S).	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
Total		**45 hrs**			

11. Course evaluation				
LO	**Method**	**Mid**	**Final**	**Total**
1, 2& 3	Written test	MCQ (30) T&F (30) Matching (20) MEQ (2) 15%	MCQ (30)	70%
1, 2& 3	Practical	20%		
1, 2& 3	Written test	10 Quiz, MCQ SAQ 5%		10%
Total		40%	60%	100%

12. Learning and teaching resources

Required:

Casarett and Doull, Toxicology, the Basic Science of Poisons; latest edition.

Additional references supporting the course

Recommended

Toxicology for the Health and Pharmaceutical Sciences Edited By Antonio Peña-Fernández, Mark D. Evans, Marcus S. Cooke Copyright 2022

Prepared by:	Checked by:	Approved by:

Course Description Form

1. Course Name:
Clinical toxicology
2. Course Code:
516
3. Semester / Year:
1st Semester / Year 5
4. Description Preparation Date:
2023-2024
5. Available Attendance Forms:
Yes
6. Number of Credit Hours (Total) / Number of Units (Total)
3 Credits
7. Course administrator's name (mention all, if more than one name)
Name: Email:
8. Course Objectives

Course Objectives	Studying the principle of exposure to different chemicals and environmental factors, their sources, mechanisms of toxicity and their risk to human beings enables students to understand the required measures to protect living organisms against suspected toxic hazards.
9. Teaching and Learning Strategies	
Strategy Learning outcome (LO)	• Students' knowledge of poisoning and the mechanism of its occurrence. • Students' knowledge of children's poisoning - and geriatric patients • Familiarity with cases of drug poisoning of the circulatory system and knowing the toxicity of plants and herbal preparations

10. Course structure					
week	**Hours**	**Require learning outcomes**	**Unit or subject name**	**Learning method**	**Evaluation methods**
1-2	3	Initial Evaluation and Management of the Poisoned Patient. Including pediatric poisoning and special consideration in the geriatric patient	Initial Evaluation and Management of the Poisoned Patient. Including pediatric poisoning and special consideration in the geriatric patient	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
2-3	3	Drug Toxicity: Over the counter drugs; caffeine; theophylline; antihistamine and decongestant; non-steroidal anti-inflammatory drugs; vitamins.	Drug Toxicity: Over the counter drugs; caffeine; theophylline; antihistamine and decongestant; non-steroidal anti-inflammatory drugs; vitamins.	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
4-9	13	Prescription Medications: Cardiovascular drugs; beta blockers; ACE inhibitors; Digoxin; Calcium channel blocker; Antiarrhythmic agents; hypoglycemic drugs; Opiods; CNS depressants; tricyclic antidepressants; anti-cholinergic phenothiazines; CNS stimulant	Prescription Medications: Cardiovascular drugs; beta blockers; ACE inhibitors; Digoxin; Calcium channel blocker; Antiarrhythmic agents; hypoglycemic drugs; Opiods; CNS depressants; tricyclic antidepressants; anti-cholinergic phenothiazines; CNS stimulant	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
10-11	4	Drug of Abuse: Opioids; Cocaine; phencyclidine; marijuana; Lysergic acid.	Drug of Abuse: Opioids; Cocaine; phencyclidine; marijuana; Lysergic acid.	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
12-13	3	Chemical and Environmental Toxins: Hydrocarbones; Household toxins; Antiseptic; Disinfectants; Camphor; moth repellents.	Chemical and Environmental Toxins: Hydrocarbones; Household toxins; Antiseptic; Disinfectants; Camphor; moth repellents.	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
14-15	4	Botanicals and plants-derived toxins: Herbal preparation; Toxic plants; Poisonous mushrooms.	Botanicals and plants-derived toxins: Herbal preparation; Toxic plants; Poisonous mushrooms.	A Theoretical lesson using PowerPoint and students discussion	MCQ, MEQ, T&F, Matching, Assignment and Essay
Total		**30 hrs**			

11. Course evaluation				
LO	**Method**	**Mid**	**Final**	**Total**
1, 2& 3	Written test	MCQ (30) T&F (30) Matching (20) MEQ (2) 15%	MCQ (30)	70%
1, 2& 3	Practical	20%		
1, 2& 3	Written test	10 Quiz, MCQ SAQ 5%		10%
Total		40%	60%	100%

12. Learning and teaching resources

Required:

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