1	**Course title**	Introduction to Pharmacology
2	**Course number**	0503201
3	**Credit hours (theory, practical)**	2
	Contact hours (theory, practical)	2
4	**Prerequisites/corequisites**	None
5	**Program title**	Doctor of Medicine
6	**Program code**	
7	**Awarding institution**	
8	**School**	Medicine
9	**Department**	Pharmacology
10	**Level of course**	Second year
11	**Year of study and semester (s)**	Second year. 1st semester
12	**Final Qualification**	MD
13	**Other department (s) involved in teaching the course**	
14	**Language of Instruction**	English
15	**Date of production/revision**	5/10/2025

16. Course Coordinator:

Prof. Malek Zihlif
Office numbers 312
office hours 11-12
phone number: 065355000

17. Other instructors:

Prof. Yacoub Irshid
Dr. Alia Shatanawi

18. Course Description:

This course explores pharmacodynamics, pharmacokinetics, drug actions and interactions. The second part of
the course focus on the autonomic nervous system and it pharmacology. The thirds part of the course focuses on fundamental principles in anti-microbial, antiviral and anticancer drugs.

19. Course aims and outcomes:

A- Aims:
Aims:
1. Explore and understand pharmacodynamics, pharmacokinetics, drug actions and interactions.
2. Understand the importance of patient safety during medication administration.
3. Describe the actual and potential effects of commonly used medications that may be important in rehabilitation
5. Understand the ethical and legal issues related to dentists' roles and responsibilitiesin medication administration.

B- Intended Learning Outcomes (ILOs):
Successful completion of the course should lead to the following outcomes:
1. Describe and explain the fundamental concepts of pharmacotherapeutics, pharmacokinetics, pharmacodynamics, and pharmacogenetics/genomics.
2. Describe principles of safe administration of medications.
3. Recognize the basics for proper choice of drug/s in proper dose in relation to age, sex, genetic variation
and concomitant disorders.
4. Describe the pharmacological actions and uses of drugs acting on the autonomic nervous system.
5. Explain the mechanisms of action and side effects of the autonomic nervous system.
6. Explain the principles of antimicrobial and antiviral drugs and antiviral drugs, selective toxicity and clinical
application.
7. Demonstrate knowledge and understanding of the mechanisms of drug action and drug resistance for both
antimicrobial and antiviral drugs and antiviral drugs.
8. Describe and explain major methods used in the treatment of cancer and
9. Be aware of the range of chemotherapeutic agents and have an understanding of their modes of action

20. Topic Outline and Schedule:

Week	Date	lecture	Topic	Instructor
1	5/10	1	Definitions& General principles	Dr. Alia Shatanawi
		2	Pharmacodynamics	Dr. Alia Shatanawi
2	12/10	3	Pharmacodynamics	Dr. Alia Shatanawi
		4	Pharmacodynamics	Dr. Alia Shatanawi
3	19/10	5	Pharmacodynamics	Dr. Alia Shatanawi
		6	Pharmacodynamics	Dr. Alia Shatanawi
4	26/10	7	Pharmacokinetics	Prof. Yacoub Irshaid
		8	Pharmacokinetics	Prof. Yacoub Irshaid
5	2/11	9	Pharmacokinetics	Prof. Yacoub Irshaid
		10	Pharmacokinetics	Prof. Yacoub Irshaid
6	9/11	11	Pharmacokinetics	Prof. Yacoub Irshaid
		12	Pharmacokinetics	Prof. Yacoub Irshaid
7	16/11	13	ANS Pharmacology	Prof. Yacoub Irshaid
		14	ANS Pharmacology	Prof. Yacoub Irshaid
8	23/11	15	ANS Pharmacology	Prof. Yacoub Irshaid
		16	ANS Pharmacology	Prof. Yacoub Irshaid
9	30/11	17	ANS Pharmacology	Prof. Yacoub Irshaid
		18	ANS Pharmacology	Prof. Yacoub Irshaid
10	7/12	19	ANS Pharmacology	Prof. Yacoub Irshaid

		20	**ANS Pharmacology**	**Prof. Yacoub Irshaid**
11	**14/12**	**21**	**Introduction to antibiotics**	**Prof. Malek Zihlif**
		22	**Introduction to antibiotics**	**Prof. Malek Zihlif**
12	**21/12**	**23**	**Introduction to antibiotics**	**Prof. Malek Zihlif**
		24	**Introduction to antibiotics**	**Prof. Malek Zihlif**
13	**28/12**	**25**	**Introduction to antibiotics**	**Prof. Malek Zihlif**
		26	**Introduction to antibiotics**	**Prof. Malek Zihlif**
14	**4/1/26**	**27**	**Introduction to antibiotics**	**Prof. Malek Zihlif**
		28	**Introduction to antibiotics**	**Prof. Malek Zihlif**

21. Teaching Methods and Assignments:

Development of ILOs is promoted through the following teaching and learning methods:
Ppt presentations
Discussions.

22. Evaluation Methods and Course Requirements:

Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:
Mid : 40%
Final: 60%

23. Course Policies:

A- Attendance policies: following university guidelines

B- Absences from exams and handing in assignments on time: N/A
C- Health and safety procedures: N/A

D- Honesty policy regarding cheating, plagiarism, misbehavior: N/A

24. Required equipment: (Facilities, Tools, Labs, Training….)

None

25. References:

Required book (s), assigned reading and audio-visuals:

1. Basic and Clinical Pharmacology
B. G Katzung
14th Edition 2007

References:
2. Pharmacology, Lippincott's Illustrated Reviews.
Howland RD and Mycek MJ
3rd edition 2006
Lippincott Williams and Wilkins

3. Modern Pharmacology with Clinical Applications
Craig & Stitzel
6th Edition 2004 (or a newer edition)

4. Goodman and Gilman's
The Pharmacological Basis of Therapeutics
Brunton, Lazo, Parker

26. Additional information:

Name of Course Coordinator: ------Prof. Malek Zihlif --Signature: ---------- Date: ----------

Head of curriculum committee/Department: ---------- Signature: ----------

Head of Department: -------Dr. Alia Shatanawi---------- Signature: ----------

Head of curriculum committee/Faculty: ---------- Signature: ----------

Dean: ---------- -Signature: ----------