



مركز الاعتماد  
وإضمان الجودة  
ACCREDITATION & QUALITY ASSURANCE CENTER



**The University of Jordan**

**Accreditation & Quality Assurance Center**

## **Course Syllabus**

**Course Name:**  
Dental  
Pharmacology 1

<b>1</b>	Course title	Dental Pharmacology 1	
<b>2</b>	Course number	0543201	
<b>3</b>	Credit hours (theory, practical)	<b>3</b>	
	Contact hours (theory, practical)	TBD	
<b>4</b>	Prerequisites/corequisites	<b>None</b>	
<b>5</b>	Program title		
<b>6</b>	Program code		
<b>7</b>	Awarding institution		
<b>8</b>	Faculty	Medicine	
<b>9</b>	Department	Pharmacology	
<b>10</b>	Level of course	<b>3</b>	
<b>11</b>	Year of study and semester (s)		
<b>12</b>	Final Qualification		
<b>13</b>	Other department (s) involved in teaching the course		
<b>14</b>	Language of Instruction	English	
<b>15</b>	Date of production/revision		

**16. Course Coordinator:**

Dr. Alia Shatanawi  
Office number: 310  
Office phone: 23458  
E-mail: a.shatanawi@ju.edu.jo

**17. Other instructors:**

**None.**

**18. Course Description:**

This course explores pharmacodynamics, pharmacokinetics, drug actions and interactions. Also the course focuses on fundamental principles in systems pharmacology and their applications, with emphasis on dental applications and implications of the drugs affecting each system.

**19. Course aims and outcomes:**

**A- 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 in different systems of the body.
4. Describe the evidence-based principles related to medication administration.
5. Understand the ethical and legal issues related to dentists' roles and responsibilities in medication administration.

**B- Intended Learning Outcomes (ILOs):**

Successful completion of the course should lead to the following outcomes:

1. Cite historical perspectives contributing to the development of pharmacology through the present.
2. Identify the roles of the professional dentists in relation to medication administration and education in both acute care and community health settings.
3. Explain the correct measures to ensure the prevention of medication errors.
4. Employ critical thinking skills to determine the effectiveness of medication administration care outcomes.
5. Predict potential drug-drug interactions and drug-food interactions based on physiologic responses to pharmacological agents and apply critical thinking skills for appropriate intervention.
6. Recognize differences in physiology and pathophysiology that must be considered in assessing correct dosages administered to "at risk" populations such as the fetus, infant, child, pregnant woman, and the frail elderly.
7. Describe the legal and ethical principles related to research and practice of medication administration in dentistry.
8. Relate the differences in Pharmacology use and its effects across the lifespan, when administering medications to culturally diverse populations commonly occurring diseases.
9. Define the pharmacological terminology pertinent to specific categories and classifications of medications in relation to drug effects on commonly occurring diseases.
10. Interpret effective communication in reports of the action, rationale for use, common and/or life-threatening side effects and dental implications for each major classification of medications.

**At the end of the course the student shall be able to:**

1. Prescribe drugs for common dental and medical ailments.
2. To appreciate adverse reactions and drug interactions of commonly used
3. drugs.
4. Observe experiments designed for study of effects of drugs.
5. Critically evaluate drug formulations and be able to interpret the clinical pharmacology of marketed preparations commonly used in dentistry.

**20. Topic Outline and Schedule:**

## Course Contents:

Week	Topic
1	General Principles
	Drug formulations & drug administration
	Pharmacodynamics
2	Pharmacodynamics
	Pharmacokinetics
	Pharmacokinetics
3	Pharmacokinetics
	Drug Interactions
	Adverse Drug Effects and Toxicity
4	Autonomic Nervous system (ANS) Pharmacology
	ANS Pharmacology

	<b>ANS Pharmacology</b>
<b>5</b>	<b>Eid Al-adha Break</b>
<b>6</b>	<b>ANS Pharmacology</b>
	<b>ANS Pharmacology</b>
	<b>ANS Pharmacology</b>
<b>7</b>	<b>ANS Pharmacology</b>
	<b>ANS Pharmacology</b>
	<b>ANS Pharmacology</b>
<b>8</b>	<b>Cardiovascular and Renal Pharmacology</b>
	<b>Cardiovascular and Renal Pharmacology</b>
	<b>Cardiovascular and Renal Pharmacology</b>
<b>9</b>	<b>MIDTERM EXAM WEEK (Tentative)</b>
<b>10</b>	<b>Cardiovascular and Renal Pharmacology</b>
	<b>Cardiovascular and Renal Pharmacology</b>
	<b>Cardiovascular and Renal Pharmacology</b>
<b>11</b>	<b>Cardiovascular and Renal Pharmacology</b>
	<b>Cardiovascular and Renal Pharmacology</b>
	<b>Cardiovascular and Renal Pharmacology</b>
<b>12</b>	<b>Central Nervous System (CNS) Pharmacology</b>
	<b>CNS Pharmacology</b>
	<b>CNS Pharmacology</b>
<b>13</b>	<b>CNS Pharmacology</b>
	<b>CNS Pharmacology</b>
	<b>CNS Pharmacology</b>
<b>14</b>	<b>CNS Pharmacology</b>
	<b>CNS Pharmacology</b>
	<b>CNS Pharmacology</b>
<b>15</b>	<b>CNS Pharmacology</b>
	<b>CNS Pharmacology</b>
	<b>CNS Pharmacology</b>
<b>16</b>	<b>FINAL EXAM WEEK</b>

## 21. Teaching Methods and Assignments:

Learning Methodology: Lectures & Exams  
 Projects and Assignments: None

## 22. Evaluation Methods and Course Requirements:

<b>Evaluation</b>	<b>Point %</b>	<b>Date</b>
<b>Midterm Exam</b>	40%	TBD
<b>Final Exam</b>	60%	TBD

**23. Course Policies:**

A- Attendance policies:

Attendance will be taken by the course coordinator.

B- Absences from exams and handing in assignments on time:

Will be managed according to the University of Jordan regulations.

C- Health and safety procedures:

D- Honesty policy regarding cheating, plagiarism, misbehavior:

Will be managed according to the University of Jordan regulations.

E- Grading policy:

0-39	F
45-49	D <sup>-</sup>
50-54	D
54-69	D <sup>+</sup>
60-64	C <sup>-</sup>
65-69	C
70-73	C <sup>+</sup>
74-76	B <sup>-</sup>
77-80	B
81-84	B <sup>+</sup>
85-89	A <sup>-</sup>
90-100	A

F- Available university services that support achievement in the course:

Availability of comfortable lecture halls, data show and internet service.

**24. Required equipment:****25. References:****Main Reference/s:**

Course Textbook:

Modern Pharmacology with clinical applications, 6th edition, Craig and Stitzel

**Additional References:**

- Goodman and Gilman: The Pharmacological Basis of Therapeutics
- Basic and Clinical Pharmacology, B. Katzung
- Lippincott's Illustrated Reviews: Pharmacology, Harvey and Champe

**26. Additional information:**

Name of Course Coordinator: -----Signature: ----- Date: -----

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

Head of Department: ----- Signature: -----

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

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

Copy to:  
Head of Department  
Assistant Dean for Quality Assurance  
Course File