

## Course Description Form

1. Course Name:	
Pharmacology I	
2. Course Code:	
Phpht24-3212	
3. Semester / Year:	
2 <sup>nd</sup> semester/ 3 <sup>rd</sup> year	
4. Description Preparation Date:	
20-03-2024	
5. Available Attendance Forms:	
Attendance Excel sheets	
6. Number of Credit Hours (Total) / Number of Units (Total)	
3 hours per week (45 hours)/ 3 Units	
7. Course administrator's name	
Name: Asst. Prof. Dr. Fawaz A. Alassaf Email: <a href="mailto:Fawaz.Alassaf@uomosul.edu.iq">Fawaz.Alassaf@uomosul.edu.iq</a> Name: Asst. Prof. Dr. Ammar A. Younis Email: <a href="mailto:ammara@uomosul.edu.iq">ammara@uomosul.edu.iq</a> Name: Asst. Prof. Dr. Adnan A. Zainal Email: <a href="mailto:adnan.zainal2010@uomosul.edu.iq">adnan.zainal2010@uomosul.edu.iq</a> Name: Dr. Mohammed Daowd Mahmoud Email: <a href="mailto:Mohameddaowd@uomosul.edu.iq">Mohameddaowd@uomosul.edu.iq</a> Name: Dr. Aseel A. Alshahwany Email: <a href="mailto:Aseel.ahmed@uomosul.edu.iq">Aseel.ahmed@uomosul.edu.iq</a>	
8. Course Objectives	
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>• Understand Fundamental Concepts of Pharmacology</li> <li>• Apply pharmacokinetic principles to predict drug absorption, distribution, metabolism, and excretion.</li> <li>• Interpret the molecular targets of drugs, including receptors, enzymes, ion channels, and transporters, to understand their physiological and therapeutic effects.</li> <li>• Apply pharmacological concepts to comprehend how adrenergic and cholinergic medications affect the autonomic nervous system, and how antibiotics work against bacterial pathogens.</li> </ul>
9. Teaching and Learning Strategies	
<b>Strategy</b>	<ul style="list-style-type: none"> <li>• Lectures and Interactive Presentations</li> <li>• Case-Based Learning</li> <li>• Interactive Workshops and Seminars</li> <li>• Self-Directed Learning and Research Projects</li> <li>• Assessment Strategies</li> </ul>

### 10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Acquired Pharmacological Knowledge	General Introduction to Pharmacology	Lecture	Quizzes and Exams
1-2	4	Acquired Pharmacological Knowledge	Pharmacokinetics	Lecture	Quizzes and Exams
3	4	Acquired Pharmacological Knowledge	Drug Receptor Interaction and Pharmacodynamics	Lecture	Quizzes and Exams
4	2	Acquired Pharmacological Knowledge	The autonomic nervous system (ANS)	Lecture	Quizzes and Exams
5-6	6	Acquired Pharmacological Knowledge	Cholinergic system	Lecture	Quizzes and Exams
7-8	6	Acquired Pharmacological Knowledge	Adrenergic system	Lecture	Quizzes and Exams
9	2	Acquired Pharmacological Knowledge	Principal of antimicrobial therapy	Lecture	Quizzes and Exams
9-10	4	Acquired Pharmacological Knowledge	$\beta$ - lactam and other cell wall synthesis inhibitor antibiotics	Lecture	Quizzes and Exams
11-12	4	Acquired Pharmacological Knowledge	Protein synthesis inhibitors	Lecture	Quizzes and Exams
12-13	3	Acquired Pharmacological Knowledge	Quinolones, Folate antagonists, and urinary tract antiseptics	Lecture	Quizzes and Exams
13	2	Acquired Pharmacological Knowledge	Antimycobacterial drugs	Lecture	Quizzes and Exams
14	2	Acquired Pharmacological Knowledge	Antifungal drugs	Lecture	Quizzes and Exams
14	1	Acquired Pharmacological Knowledge	Antiprotozoal drugs	Lecture	Quizzes and Exams
15	2	Acquired Pharmacological Knowledge	Anthelmintic drugs	Lecture	Quizzes and Exams
15	1	Acquired Pharmacological Knowledge	Antiviral drugs	Lecture	Quizzes and Exams

### 11. Course Evaluation

- 30 M mid-term (Quizzes (5%); Midterm Exam (25%))
  - 70 M final exam
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- 100 M total

## 12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	➤ “Lippincott Illustrated Reviews Pharmacology” by Karen Whalen, 7 <sup>th</sup> edition (2020)
Main references (sources)	➤ "Basic and Clinical Pharmacology" by Bertram G. Katzung, Susan B. Masters, and Anthony J. Trevor.
Recommended books and references (scientific journals, reports...)	<ul style="list-style-type: none"> <li>➤ "Rang &amp; Dale's Pharmacology" by James M. Ritter, Rod J. Flower, and Graeme Henderson</li> <li>➤ "Goodman &amp; Gilman's: The Pharmacological Basis of Therapeutics" by Laurence L. Brunton, Bjorn C. Knollmann, and Randa Hilal-Dandan.</li> </ul>
Electronic References, Websites	<ul style="list-style-type: none"> <li>➤ PubMed (<a href="https://pubmed.ncbi.nlm.nih.gov/">https://pubmed.ncbi.nlm.nih.gov/</a>)</li> <li>➤ Medscape (<a href="https://www.medscape.com/">https://www.medscape.com/</a>)</li> <li>➤ UpToDate (<a href="https://www.uptodate.com/">https://www.uptodate.com/</a>)</li> <li>➤ Pharmacology Education Project (<a href="https://pharmacologyeducation.org/">https://pharmacologyeducation.org/</a>)</li> </ul>