

School of Pharmacy / School of Pharmacy (English)

2024 - 2025 Academic Year

PHARMACEUTICAL TECHNOLOGY LAB. IV

Syllabus

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
PHARMACEUTICAL TECHNOLOGY LAB. IV	PHA4214879	Spring Semester	0+3	1,5	3
Prerequisites Courses					
Recommended Elective Courses					
Language of Instruction	English				
Course Level	First Cycle (Bachelor's Degree)				
Course Type	Required				
Course Coordinator	Prof.Dr. Fatma Julide AKBUĞA				
Name of Lecturer(s)	Prof.Dr. Fatma Julide AKBUĞA				
Assistant(s)					
Aim	To be intended to enable students to have practical skills the preparations and quality controls of solid dosage forms, stability tests and reaction kinetics.				
Course Content	This course contains; Demonstration,The preparations of cachet,The preparation of hard gelatin capsules,Wet and dry granulation,The preparation of tablet by direct compression method,The preparation of tablet by wet granulation method,The preparation of tablet by wet granulation method,The preparation of effervescent tablets,The coating of tablets by Wurster Apparatus,The preparation of dragee,The quality control of granule,The quality control of tablets,Accerelated stability test,Make-up.				
Course Learning Outcomes			Teaching Methods	Assessment Methods	
At the and of this course, the students;					
1. prepare powder formulations, capsule and tablet.			10, 12, 17, 19, 9	A, D	
1. will be defined powder formulations, capsule and tablet.			10, 12, 17, 19, 9	A, D	
1.2. recognize the excipients of tablet.			10, 12, 17, 19, 9	A, D	
1.3. Recognize excipients used in the preparation of solid dosage forms.			10, 12, 17, 19, 9	A, D	
2. will be evaluated the coating methods of tablet-solid dosage forms.			10, 12, 17, 19, 9	A, D	
2.1. interpret the devices used the coating of solid dosage forms			10, 12, 17, 19, 9	A, D	
2.2. categorize the coating of solid dosage forms.			10, 12, 17, 19, 9	A, D	
3. will be assessed the quality control of the solid dosage forms.			10, 12, 17, 19, 9	A, D	
3.1. interpret the controls of granule.			10, 12, 17, 19, 9	A, D	
3.2. design the quality control of tablets.			10, 12, 17, 19, 9	A, D	
Teaching Methods	10: Discussion Method, 12: Problem Solving Method, 17: Experimental Technique, 19: Brainstorming Technique, 9: Lecture Method				
Assessment Methods	A: Traditional Written Exam, D: Oral Exam				
Lecture Schedule					
Sequenc e	Topics	Preliminary Preparation			
1	Demonstration	1,2,3,4,5,6,7,8			
2	The preparations of cachet	1,2,3,4,5,6,7,8			
3	The preparation of hard gelatin capsules	1,2,3,4,5,6,7,8			
4	Wet and dry granulation	1,2,3,4,5,6,7,8			
5	The preparation of tablet by direct compression method	1,2,3,4,5,6,7,8			
6	The preparation of tablet by wet granulation method	1,2,3,4,5,6,7,8			
7	The preparation of tablet by wet granulation method	1,2,3,4,5,6,7,8			
8	The preparation of effervescent tablets	1,2,3,4,5,6,7,8			
9	The coating of tablets by Wurster Apparatus	1,2,3,4,5,6,7,8			
10	The preparation of dragee	1,2,3,4,5,6,7,8			
11	The quality control of granule	1,2,3,4,5,6,7,8			
12	The quality control of tablets	1,2,3,4,5,6,7,8			
13	Accerelated stability test	1,2,3,4,5,6,7,8			
14	Make-up	1,2,3,4,5,6,7,8			
Evaluation Methods		Weight(%)			
Midterm Exam		60			
General Exam		40			

Resources	
1-Lecture notes, powerpoint presentations, relevant web pages will be given to students. 2) Alpmen G, Altınkurt T, Bergişadi N, Topaloğlu Y, Tunçel T, Araman A, Yener G, Özsoy Y,'Farmasötik Teknoloji ve Kozmetoloji Laboratuvar Kitabı' AB Ofset, İstanbul, 2000.Bozkır A,	
3) Karataş A, Haşçıçek C, Canefe K, Kılıçarslan M, Tarımcı N, Yüksel N, Gönül N,Özdemir N, Baykara T, Kılınc-Şen T, Çomoğlu T, 'Farmasötik Teknoloji Deneysel Uygulamalar Kitabı' Ankara Üniversitesi Eczacılık Fakültesi Yayınları.	
4) Türk Farmakopesi (TF 2017)	
5) Tıbbi ve Kozmetik Formüller (Prof. Dr. Kasım Cemal Güven) 2020	
6) Martindale-the Extra Pharmacopoeia	
7) USP United States Pharmacopoeia 32	
8) European Pharmacopoeia 10	