School of Pharmacy / School of Pharmacy (English)

2024 - 2025 Academic Year

PHARMACEUTICAL CHEMISTRY LAB. I

Syllabus

Course Description					
Name	**Code**	**Semester**	**T+A Hour**	**Credit**	**ECTS**
PHARMACEUTICAL CHEMISTRY LAB. I	PHA3114146	Fall Semester	0+3	1,5	3

Prerequisites Courses	ORGANİK KİMYA II
Recommended Elective Courses	
Language of Instruction	English
Course Level	First Cycle (Bachelor's Degree)
Course Type	Required
Course Coordinator	Prof.Dr. Mine YARIM YÜKSEL
Name of Lecturer(s)	Prof.Dr. Mine YARIM YÜKSEL
Assistant(s)	
Aim	Using materials and methods in the synthesis of drug molecules and thin layer chromatography
Course Content	This course contains; Principles of Pharmaceutical Chemistry Laboratory Studies, The tools and equipment used in organic syntheses,The methods used in organic syntheses: mixing, heating, cooling and drying ,Separation and purification methods: distillation, crystallization, extraction,Determination of melting point, chromatographic methods, efficiency andaccountability of the reaction,The synthesis of some organic and pharmaceutical active substances ,The synthesis of some organic and pharmaceutical active substances,The synthesis of some organic and pharmaceutical active substances,The synthesis of some organic and pharmaceutical active substances,The synthesis of some organic and pharmaceutical active substances,The synthesis of some organic and pharmaceutical active substances,The synthesis of some organic and pharmaceutical active substances,The synthesis of some organic and pharmaceutical active substances.

Course Learning Outcomes	**Teaching Methods**	**Assessment Methods**
At the end of this course, students; 3.1.will be able to apply the distillation, crystallization, melting point 3.2.determine the necessary equipment for the identification of the synthesized compound 1. will be able to use the necessary equipment for synthesis. 1.1. describe the necessary equipment for synthesis. 1.2. use the necessary equipment for synthesis. 2. will be able to apply the necessary methods for synthesis. 2.1. determine the necessary methods for synthesis. 2.2. adapt the necessary methods for synthesis. 3. will be able to apply the identification methods of the synthesized compounds	12, 14, 16, 17, 5, 9	A

Teaching Methods	12: Problem Solving Method, 14: Self Study Method, 16: Question - Answer Technique, 17: Experimental Technique, 5: Cooperative Learning, 9: Lecture Method
Assessment Methods	A: Traditional Written Exam

Lecture Schedule

Sequence	**Topics**	**Preliminary Preparation**
1	Principles of Pharmaceutical Chemistry Laboratory Studies	Reading the references
2	The tools and equipment used in organic syntheses	Reading the references
3	The methods used in organic syntheses: mixing, heating, cooling and drying	Reading the references
4	Separation and purification methods: distillation, crystallization, extraction	Reading the references
5	Determination of melting point, chromatographic methods, efficiency andaccountability of the reaction	Reading the references
6	The synthesis of some organic and pharmaceutical active substances	Reading the references
7	The synthesis of some organic and pharmaceutical active substances	Reading the references
8	The synthesis of some organic and pharmaceutical active substances	Reading the references
9	The synthesis of some organic and pharmaceutical active substances	Reading the references
10	The synthesis of some organic and pharmaceutical active substances	Reading the references
11	The synthesis of some organic and pharmaceutical active substances	Reading the references
12	The synthesis of some organic and pharmaceutical active substances	Reading the references
13	The synthesis of some organic and pharmaceutical active substances	Reading the references
14	The synthesis of some organic and pharmaceutical active substances	Reading the references

Evaluation Methods	**Weight(%)**
Midterm Exam	60
General Exam	40

Resources
The laboratory notes will be given to the students.