

School of Pharmacy / School of Pharmacy (English)

2024 - 2025 Academic Year

PHARMACEUTICAL CHEMISTRY III

Syllabus

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
PHARMACEUTICAL CHEMISTRY III	PHA4114864	Fall Semester	3+0	3	5
Prerequisites Courses					
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	The aim of this course is to inform about drugs effected on otonom nervous system and cardiovascular system and otacoids, hormonsand their related drugs.				
Course Content	This course contains; Direct and indirect sympathomimetics and sympatholytics., Direct and indirect parasymphomimetics and parasympholytics.,Drugs used in heart failure, antiarrhythmics and antiallergens. ,Calcium channel blockers, peripheric vasodilators and adrenergic receptorblockers.,Hemostatics, anticoagulants, antithrombolytics and antianemics. ,Arterial and venous vasodilators, drugs acting on vascular smooth muscle anddireckt acting vasodilators.,Drugs acting on renin-angiotensin system. ,Diuretics and antihyperlipidemic drugs., Digestants, antiulcer agents, emetic and amtiemetics, laxatives andantidiarrheals.,Thyroid and peptide hormones and antidiabetics.,Sex hormones.,Adrenocorticoids. ,Antihistaminics ,Radiocontrasts, vitamine and immunomodulators..				
Course Learning Outcomes			Teaching Methods	Assessment Methods	
At the end of this course, the students will be able to; 1.evaluate the drugs acting on autonomous nervous system. 1.1.debate the structure activity relationships of the drugs acting on sempatic system. 1.2. debate the structure activity relationships of the drugs acting on parasempatic system.1.3. illustrate the synthetic methods of the drugs acting on autonomous nervous system. 2. relate the drugs acting on cardiovascular system.2.1. illustrate the structure activity relationships of antiarrhythmic and antianginal drugs. 2.2. debate the structure activity relationships of peripheric vasodilators and adrenergic neuron and receptor blockers. 2.3. illustrate the synthetic methods of the cardiovascular system drugs. 3. distinguish direckt acting vasodilators. 3.1. debate the structure activity relationships of the drugs acting on vascular smooth muscle. 3.2. debate the structure activity relationships of the ganglion bloklers. 3.3. debate the structure activity relationships of the drugs acting on renin-angiotensin system. 3.4. illustrate the synthetic methods of the vasodilator drugs. 4. compare hormones and otacoids. 4.1. interpret the structure activity relationships of hormone and otacoid-structured drugs. 4.2. interpret the structure activity relationships of the sex hormones. 4.3. interpret the structure activity relationships of the antihistaminic drugs. 4.4. illustrate the synthetic methods of the hormones and otacoids			16, 19, 9	A	
Teaching Methods			16: Question - Answer Technique, 19: Brainstorming Technique, 9: Lecture Method		
Assessment Methods			A: Traditional Written Exam		
Lecture Schedule					
Sequenc e	Topics	Preliminary Preparation			
1	Direct and indirect sympathomimetics and sympatholytics.	Reading the references			
2	Direct and indirect parasymphomimetics and parasympholytics.	Reading the references			
3	Drugs used in heart failure, antiarrhythmics and antiallergens.	Reading the references			
4	Calcium channel blockers, peripheric vasodilators and adrenergic receptorblockers.	Reading the references			
5	Hemostatics, anticoagulants, antithrombolytics and antianemics.	Reading the references			
6	Arterial and venous vasodilators, drugs acting on vascular smooth muscle anddireckt acting vasodilators.	Reading the references			
7	Drugs acting on renin-angiotensin system.	Reading the references			
8	Diuretics and antihyperlipidemic drugs.	Reading the references			
9	Digestants, antiulcer agents, emetic and amtiemetics, laxatives andantidiarrheals.	Reading the references			
10	Thyroid and peptide hormones and antidiabetics.	Reading the references			
11	Sex hormones.	Reading the references			
12	Adrenocorticoids.	Reading the references			
13	Antihistaminics	Reading the references			
14	Radiocontrasts, vitamine and immunomodulators.	Reading the references			
Evaluation Methods		Weight(%)			
Midterm Exam		40			
General Exam		60			
Resources					
Pharmaceutical chemistry III notes will be given to the students					