

# AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Therapeutically Selective Polymers								
Course Code		KIM663		Couse Level		Third Cycle (Doctorate Degree)				
ECTS Credit	8	Workload	206 (Hours)	Theory	3	Practice	0	Laboratory	0	
Objectives of the Course		Natural and synthetic polymers with use of polymer in the health industry. Teach the application and research area of therapeutically use of specific sorbents.								
Course Content		Structure of natural and synthetic polymers and their usage in treatment.								
Work Placement		N/A								
Planned Learning Activities and Teaching Methods			Explanation	n (Presenta	tion), Discussion	on, Individual	Study			
Name of Lectu	ırer(s)									

Assessment Methods and Criteria					
Method	Quantity Perc				
Midterm Examination	1	20			
Final Examination	1	60			
Assignment	2	20			

## **Recommended or Required Reading**

1 Instructor notes

Week	Weekly Detailed Course Contents					
1	Theoretical	Natural and synthetic polymers				
2	Theoretical	Use of polymers in the health industry				
3	Theoretical	Use of polymers in the health industry: Application and research area				
4	Theoretical	Polymeric biomaterials				
5	Theoretical	Polymeric biomaterials				
6	Theoretical	Use of polymers in bioseparation processess				
7	Theoretical	Blood fractionation				
8	Intermediate Exam	Midterm Exam				
9	Theoretical	Hemoperfusion ve extracorporal theraphy				
10	Theoretical	Body fluids and biomaterials interaction				
11	Theoretical	Therapeutically use of specific sorbents				
12	Theoretical	Therapeutically use of specific sorbents: Application and research area				
13	Theoretical	What might be in the future?				
14	Theoretical	Student presentation				
15	Theoretical	Student presentation				
16	Final Exam	Final Exam				

Workload Calculation						
Activity	Quantity	Preparation	Duration	Total Workload		
Lecture - Theory	14	0	3	42		
Assignment	2	40	0	80		
Midterm Examination	1	40	2	42		
Final Examination	1	40	2	42		
	206					
	8					
*25 hour workload is accepted as 1 ECTS						

## **Learning Outcomes**

- 1 To learn the knowledge about preparation and structure of natural and synthetic polymers
- 2 To learn and to discuss the place of the polymers in medicine.



To learn the applications of the therapeutically selective polymers.

to learn the knowledge about Hemoperfusion ve extracorporal theraphy

to learn the knowledge about therapeutically use of specific sorbents

#### Programme Outcomes (Chemistry Doctorate)

- 1 Depending on the master degree competences, develops, insights and innovates current and advanced knowledge and/or research in proficiency level.
- 2 Gains high skill levels in using research methods in the field of his/her study.
- Comprehends the interaction between disciplines related to his/her field. Reaches to original results using his/her expertise in order to analyze, synthesize and evaluate new and complicated ideas.
- 4 Enlarges the boundaries of his/her field of knowledge by publishing at least one research paper in national and/or international peer-reviewed journals.
- Defends his/her original opinions related to his/her field before authority and communicates effectively illustrating his/her competence.
- 6 May communicate and debate written, orally and visually in European Language Portfolio level C1.
- Follows the developments in computer software and information and communication technologies developed for his/her research area and uses these in order to solve research problems.
- 8 Collaborates for scientific research with national and international research teams.
- Contributes to the course of creation and maintenance of knowledge based society and by introducing the scientific, social and cultural developments to the society he/she is living in.

#### Contribution of Learning Outcomes to Programme Outcomes 1: Very Low, 2: Low, 3: Medium, 4: High, 5: Very High

	L1	L2	L3	L4	L5
P1	5	5			
P2	5	5			
P3	5	5			
P4			5	5	5
P5			5	5	5
P6			5	5	5

