AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Artifical Organs								
Course Code	KİM666		Couse Level	Third Cycle (Doctorate Degree)					
ECTS Credit	8	Workload	206 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	Artificial organ technology. Teach the different artifical organs and application of synthetic biomaterial using in the artifical organ modelling								
Course Content	History of the artificial organs, examples of applications of artificial organs								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Individual Study								
Name of Lecturer(s)									

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
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	History of the artifical organs
2	Theoretical	Application of synthetic biomaterial using in the artifical organ construction
3	Theoretical	Artifical kidney
4	Theoretical	Artifical heart
5	Theoretical	Artifical liver
6	Theoretical	Artifical lungs
7	Theoretical	Artifical pancreas
8	Intermediate Exam	Midterm Exam
9	Theoretical	Artificial blood
10	Theoretical	Artificial eye
11	Theoretical	Artificial ear
12	Theoretical	Artificial derm
13	Theoretical	Artificial muscle
14	Theoretical	Student presentations
15	Theoretical	Student presentations
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
			Total Workload (Hours)	206
			[Total Workload (Hours) / 25*] = **ECTS**	8
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	To learn about usage of artificial organs.
2	To have knowledge about biomaterials which are used for construction of artificial organs.

3	To have knowledge about artificial kidney
4	To have knowledge about artificial heart
5	To have knowledge about artificial derm

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.
3	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.
5	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.
7	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.
9	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