AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Lipid and Membrane Biochemistry								
Course Code	KİM652		Couse Level	Third Cycle (Doctorate Degree)					
ECTS Credit	8	Workload	200 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	The aim of this course is to teach structure, function and metabolism of lipids and lipid containing units.								
Course Content	The structure and function of triglycerids, phospholipids and sphingolipids. cholesterol. Waxes. Glycolipids. Steroids and cholesterol. Fluid mosaic model of cell membranes.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Case Study, Individual Study								
Name of Lecturer(s)									

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	20
Final Examination	1	35
Assignment	3	45

Recommended or Required Reading	
1	Instructor notes

Week	Weekly Detailed Course Contents	
1	Theoretical	Lipids
2	Theoretical	Lipids
3	Theoretical	Oil acids
4	Theoretical	Oil acids
5	Theoretical	Triacylgliserols
6	Theoretical	Triacylgliserols
7	Theoretical	Phosphoacylgliserols
8	Theoretical	Waxes, Sphingolipids
9	Theoretical	Waxes, Sphingolipids
10	Intermediate Exam	Midterm
11	Theoretical	Glycolipids, Steroids
12	Theoretical	Steroids, cholesterol
13	Theoretical	Biologic membranes and membrane receptors
14	Theoretical	Fluid mozaic model and transport
15	Theoretical	Fluid mozaic model and transport
16	Final Exam	Final Exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	3	42
Assignment	6	0	12	72
Midterm Examination	1	30	2	32
Final Examination	1	52	2	54
			Total Workload (Hours)	200
			[Total Workload (Hours) / 25*] = **ECTS**	8
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	Learns the chemical structure of lipids.
2	Knows the classification and function of lipids.

3	Knows the basic components of cell membrane and membrane receptors.
4	Learns the mechanism and kinetics of membrane transport.
5	to learn the synthesis and degradation of lipids

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	5	5	5
P3	3	3	3	3	5
P4				3	5
P5	2				
P8		4			4