



**AYDIN ADNAN MENDERES UNIVERSITY**  
**GRADUATE SCHOOL OF HEALTH SCIENCES**  
**MEDICAL BIOLOGY**  
**MEDICAL BIOLOGY**  
**MEDICAL BIOLOGY MASTER**  
**COURSE INFORMATION FORM**

Course Title		Exercise Metabolism							
Course Code		TIB536		Course Level		Second Cycle (Master's Degree)			
ECTS Credit	5	Workload	125 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course									
Course Content									
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation)					
Name of Lecturer(s)									

#### Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

#### Recommended or Required Reading

1	2. Exercise Metabolism, Hargreaves and Spriet, Library of Congress (2005)
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Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction to the exercise metabolism
2	Theoretical	Anaerobic metabolism during exercise
3	Theoretical	The carbohydrate metabolism during exercise
4	Theoretical	The hepatic metabolism during exercise
5	Theoretical	The lactate transport in skeletal muscle during exercise
6	Theoretical	The lipid mobilization in fat during exercise
7	Theoretical	The lipid metabolism in skeletal muscle during exercise
8	Theoretical	The effect of exercise to protein and amino acid metabolism in skeletal muscle
9	Intermediate Exam	Midterm Exam
10	Theoretical	The metabolic factors in fatigue
11	Theoretical	Fatigue during static and dynamic exercise
12	Theoretical	The effect of exercise on substrate turnover and oxidation
13	Theoretical	Lipolysis during exercise
14	Theoretical	Lactate transport system
15	Final Exam	Final Exam

#### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	13	7	2	117
Midterm Examination	1	2	2	4
Final Examination	1	2	2	4
			Total Workload (Hours)	125
			[Total Workload (Hours) / 25*] = ECTS	5

\*25 hour workload is accepted as 1 ECTS

#### Learning Outcomes

1	
2	
3	
4	



5

**Programme Outcomes** (*Medical Biology Master*)

1	To acquire fundamental knowledge on medical biology field
2	To gain expertise on molecular biology techniques
3	To utilize molecular biology techniques
4	To be able to construct and conduct a research project
5	To be able to follow and interpret scientific advancements

**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	2	3
P2	1	1	1	1	1
P3	1	1	1	1	1
P4	1	1	1	1	2
P5	3	3	3	5	3

