



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

Course Title	Principles of Epigenetics								
Course Code	TIB540	Course Level		Second Cycle (Master's Degree)					
ECTS Credit	4	Workload	98 (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)	Assoc. Prof. Gizem DÖNMEZ YALÇIN								

#### Assessment Methods and Criteria

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

#### Recommended or Required Reading

1	Epigenetics by C. David Allis (Editor), Marie-Laure Caparros (Editor), Thomas Jenuwein (Editor), Danny Reinberg (Editor) Cold Spring Harbor Laboratory Press; 2 edition (February 28, 2015)
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Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction to epigenetic
2	Theoretical	Transcription process
3	Theoretical	DNA packaging and chromatin structure
4	Theoretical	Modifying the structure of chromatin
5	Theoretical	DNA methylation
6	Theoretical	Histone modifications
7	Intermediate Exam	Midterm Exam
8	Theoretical	The machinery of histone modification
9	Theoretical	Locus specific histone modification
10	Theoretical	Epigenetic control of gene expression
11	Theoretical	Epigenetic control of mitosis
12	Theoretical	Epigenetic control of cell differentiation
13	Theoretical	Epigenetic control of neurodegeneration
14	Final Exam	Final exam

#### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	13	4	2	78
Midterm Examination	1	8	2	10
Final Examination	1	8	2	10
Total Workload (Hours)				98
[Total Workload (Hours) / 25*] = ECTS				4

\*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	3	2
P2	1	1	1	3	5
P3	1	1	1	3	5
P4	1	1	1	2	1
P5	3	3	3	4	5

