



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Basic Oncology							
Course Code		THE637		Couse Level		Third Cycle (Doctorate Degree)			
ECTS Credit	8	Workload	206 ( <i>Hours</i> )	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		To define basic oncology, examine carcinogenesis and anticancer treatment methods							
Course Content		Carcinogenesis, Cell Cycle and Cancer relationship, the role of differentiation and transformation in cancer development and the molecular mechanisms. Cell Death Mechanisms, Angiogenesis, Invasion and Metastasis, Importance of Signaling Pathways in Cancer, The importance of Oncogene and Tumor Suppressor Genes in cancer diagnosis, treatment and follow-up. Cancer Cell Culture, Western Blotting, DNA and RNA Isolation from Tumor Tissue, Real-time PCR in Cancer Diagnosis and Mutation Analysis.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Demonstration, Discussion, Individual Study					
Name of Lecturer(s)									

### Assessment Methods and Criteria

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

### Recommended or Required Reading

1	Use and Interpretation of Laboratory Tests in Oncology. Douglas C. Aziz, Specialty Laboratories. Third edition 1998
2	Molecular Biology in Cancer Medicine. Razelle Kurzrock, Moshe Talpaz, Martin Dunitz 1995.
3	Pathologic Basis of Disease. Vinay Kumar, Abul K. Abbas, Nelson Fausto, Elsevier Saunderss, 2015 Seventh Edition
4	Molecular Mechanism of Cancer. Georg F. Weber, Springer, 2007
5	The Biology of Cancer Robert A. Weinberg, Gariand Science 2014

Week	Weekly Detailed Course Contents	
1	Theoretical & Practice	Introduction to Basic Oncology
2	Theoretical & Practice	Cancer Etiology
3	Theoretical & Practice	Cell differentiation and transformation
4	Theoretical & Practice	Signaling Pathways in Cancer-I
5	Theoretical & Practice	Signaling Pathways in Cancer-II
6	Theoretical & Practice	Oncogene and Tumor Suppressor Genes
7	Theoretical & Practice	The Importance of Staging in Cancer
8	Intermediate Exam	Midterm exam
9	Theoretical & Practice	Mutations in Cancer
10	Theoretical & Practice	DNA Damage and Repair in Cancer
11	Theoretical & Practice	Epigenetic Changes in Cancer
12	Theoretical & Practice	Cancer and the Microenvironment
13	Theoretical & Practice	Cancer and Metastasis
14	Theoretical & Practice	Molecular Basics of Anticancer Therapy
15	Final Exam	Final exam

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	13	1	2	39
Assignment	2	24	2	52
Laboratory	13	1	2	39
Midterm Examination	1	24	2	26



Final Examination	1	48	2	50
Total Workload (Hours)				206
[Total Workload (Hours) / 25*] = <b>ECTS</b>				8
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

1	Learning the Basic Oncological Approach
2	To examine the carcinogenesis-tumorigenesis steps
3	To discuss genetic changes and mutations in cancer
4	Discussing anticancer treatment differences
5	Learns the methods in cancer studies

### Programme Outcomes (Histology and Embryology Medical) Doctorate)

1	To have basic laboratory skills and attitudes
2	To be a scientist with strong educational background and presentation.
3	To have information about laboratory safety
4	To learn the histology and embryonic development of related organs and systems
5	To know the differences between related organs at the tissue level.

### 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	3	4	5	4	5
P2	4	5	4	3	4
P3	5	3	3	4	5
P4	5	4	4	5	4
P5	4	5	5	4	5

