



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Human Genetics							
Course Code		ÇS311		Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	3	Workload	77 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		To inform about gene and genetic science, explanation of the genes' effect on the livings, to inform about the characteristics that are arised depending on genes, and problems /disease that seen due to inherited in human.							
Course Content		Definitions of the basic terms related to genetics (chromosomes, DNA, genes, codon and genome etc). Structure and functions of the genes, and the importance of gene on the structure of living and the realization of the function related to of the vitality. Genes that people have and effect of these genes on the properties owned by the people. Anomalies that resulted from mutation occurring in the genes.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Case Study, Individual Study					
Name of Lecturer(s)		Lec. Sevil ÖZCAN							

### Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

### Recommended or Required Reading

1	Genetic (2003) William S. Klug & Michael R. Cummings (Trans. Prof. Cihan Öner), Palme Publ.
2	Basic Rules of The Life V.1 / Part.1 (2004) Ali Demirsoy, Meteksan
3	General Biyology (2000) William T. Keeton, James L. Gould & Carol Grant Gould (Trans. Prof. Ali Demirsoy, Prof. İsmail Türkan

Week	Weekly Detailed Course Contents	
1	Theoretical	History of the genetis science.
2	Theoretical	Genetic researches and different approaches on this subject. Progress seen in some areas due to the research conducted in genetics.
3	Theoretical	Definition of the basic concepts such as chromosome, gene, genome, genotipe, fenotipe to be hereditary material.
4	Theoretical	Cell cycle and cell divisions.
5	Theoretical	Mendelian genetics.
6	Theoretical	What is a family tree, how to draw it?
7	Theoretical	Gene linkage, crossover and mapping.
8	Theoretical	Midterm
9	Theoretical	Extranuclear inheritance.
10	Theoretical	Determination of sex and sex chromosomes.
11	Theoretical	Forming the map of human chromosomes.
12	Theoretical	Chromosome mutations: changes in chromosome number and order.
13	Theoretical	AB0 blood groups, Bombay phenotype, Rh antigens, sickle cell anemia and human hemoglobin.
14	Theoretical	Some hereditary features (in autosomal chromosomes) in human.
15	Theoretical	Human genome project.

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Individual Work	9	0	3	27
Midterm Examination	1	2	1	3



Final Examination	1	4	1	5
Total Workload (Hours)				77
[Total Workload (Hours) / 25*] = ECTS				3
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

1	Know the genetic concepts such as gene, chromosome and genome.
2	Knows that mutations can occur in living organisms depending on different conditions, and can occur the structural or functional changes in living according to this change.
3	Knows that the human genetic structure and the chromosomal anomalies seen in human.
4	Knows Mendelian genetics and crosses.
5	Knows the deviations from Mendelian genetics and types.

### Programme Outcomes (First and Emergency Aid )

1	To be able to be aware of their professional authorities and responsibilities.
2	To be able to use the principles of individual and organizational communication skills.
3	To be able to define the emergency medical services and the pre-hospital emergency medical system devices used in Turkey and the world .
4	To be able to perform physical assessment of the patient and primary and secondary inspection.
5	To be able to apply the methods of handling and transportation of the patient
6	To be able to recognize the rules of the general approach to trauma patients and to be able to be capable of handling and maintenance of trauma equipment.
7	To be able to recognize emergency vehicles' mechanical and technical equipment and to be able to drive emergency vehicles.
8	To be able to identify the principles of pre-hospital emergency care in cases of environmental emergencies.
9	To be able to identify the principles of pre-hospital emergency care in medical emergencies.
10	To be able to analyze the ECG rhythm and apply the principles of pre-hospital emergency care for rhythm Disorders.
11	To be able to recognize and apply the pre-hospital emergency care drugs and fluids.
12	To be able to identify basic life support applications, Advanced Life Support applications and Advanced air way applications.
13	To be able to recognize the principles of pre-hospital emergency during disasters.
14	To be able to protect and maintain the highest level of physical and mental health.
15	To be able to recognize human anatomy and physiology.
16	To be able to develop good communication and human relations skills with colleagues and patients.
17	To be able to apply Infection Control Methods and check infectious situations of emergency vehicles and equipment, ensure the conditions of asepsis-antisepsis and pre-hospital emergency care with Infectious Diseases.
18	To have the appropriate knowledge of medical sciences at the level of interest, to use specific medical terms and terminology of field

### 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	1	1	1	1	1
P2	1	1	1	1	1
P3	2	2	2	2	2
P4	2	2	2	2	2
P5	1	1	1	1	1
P6	1	1	1	1	1
P7	1	1	1	1	1
P8	1	1	1	1	1
P9	1	1	1	1	1
P10	1	1	1	1	1
P11	1	1	1	1	1
P12	1	1	1	1	1
P13	1	1	1	1	1
P14	3	3	3	3	3
P15	5	5	5	5	5
P16	3	3	3	3	3
P17	3	3	3	3	3

