



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title	Genetic								
Course Code	TR1125		Course Level		Short Cycle (Associate's Degree)				
ECTS Credit	3	Workload	75 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	To teach the reasons of heredity and variation in living organisms and also to provide background for plant and animal breeding courses.								
Course Content	Monohybrid, dihybrid and polygenic inheritance, genetic interactions, multiple allelism, sex-related inheritance, genetic linkage, Probability calculations, , statistical concepts, mutations, quantitative inheritance, population genetics								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Individual Study, Problem Solving								
Name of Lecturer(s)									

### Assessment Methods and Criteria

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

### Recommended or Required Reading

1	Genetik , Cemal Erensayın , 1995.Dilek Ofset Matbaacılık.
2	Genetik. Mehmet Topaktaş. 2014. Nobel Akademik Yayıncılık
3	Kalıtımın Genel ilkeleri. <a href="http://www.biyolojisisitesi.net/uniteler/kalitim-in-genel-ilkeleri/genetikte-kullanilan-temel-kavramlar.html">http://www.biyolojisisitesi.net/uniteler/kalitim-in-genel-ilkeleri/genetikte-kullanilan-temel-kavramlar.html</a>

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction to genetic (definition, historical development, genetics and human relations, genotype and phenotype, heredity and variation)
2	Theoretical	Cytological principles of heredity,
3	Theoretical	Cytological principles of heredity,
4	Theoretical	Monohybrid inheritance
5	Theoretical	Dihybrid inheritance
6	Theoretical	Genetic interactions
7	Theoretical	Genetic interactions
8	Intermediate Exam	Midterm
9	Theoretical	Multiple allelism
10	Theoretical	Determination of sex
11	Theoretical	Sex-related inheritance
12	Theoretical	Mutations
13	Theoretical	Quantitatif inheritance
14	Theoretical	Quantitatif inheritance
15	Theoretical	Population Genetics
16	Final Exam	Final

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Assignment	4	0	4	16
Individual Work	1	3	3	6
Midterm Examination	1	4	1	5



Final Examination	1	5	1	6
Total Workload (Hours)				75
[Total Workload (Hours) / 25*] = ECTS				3
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

1	Knows the cytological principles of heredity
2	Knows to inheritance related to single and two genes
3	Knows to genetic interactions, multiple allelism and sex-related inheritance
4	Knows to quantitative inheritance
5	Knows to population genetics

### Programme Outcomes (Apiculture)

1	Understand to bee family (ecology, behavior), needs and diseases of bees. To make needs for healthy colony.
2	Produce of bee and bee products with modern techniques
3	Understand and use of tools and equipments used in Apiculture
4	Understand to nectar and pollen vegetables
5	To know nomadic apiculture conditions
6	Packing of bee products
7	Application to hygienic rules in apiculture enterprise
8	To have information of professional ethics and responsibility
9	Ability to work in team and individual
10	To communicate orally and in writing

