



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

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|--|---|---|------------|---|---|----------------------------------|---|------------|---|
| Course Title | | Genetic | | | | | | | |
| Course Code | | TRİ125 | | Couse 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) | | Ins. Ali Kemali ÖZÜĞÜR | | | | | | | |

Assessment Methods and Criteria

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

Recommended or Required Reading

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

| 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 |



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|---|---|---|---|----|
| 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

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| 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 (Olive Cultivation and Olive Processing Technology)

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| 1 | To be able to identify olive, soil and water and to having knowledge these |
| 2 | To be able to comprehend knowledge botany and fruit growing |
| 3 | To be able to comprehend table olive technology and to apply |
| 4 | To be able to comprehend knowledge basic biochemistry and olive oil chemistry and to have olive oil with modern and traditional systems, to have knowledge olive oil refinery, basic process and to have apply olive oil extraction |
| 5 | To be able to preserve olive and olive products in appropriate condition |
| 6 | To be able to comprehend growing olive plant with necessary agricultural methods and to have general maintenance of olive tree |
| 7 | To be able to evaluate olive by-products |
| 8 | To be able to comprehend knowledge about vegetable genetic |
| 9 | To be able to comprehend knowledge occupational safety and have apply first aid |
| 10 | To be able to apply necessary laboratory analysis in olive and olive products production |
| 11 | To be able to apply hygiene and sanitation rules in factory |
| 12 | To be able to comprehend knowledge of professional ethics and responsibility |
| 13 | To be able to comprehend knowledge marketing of olive products and to have olive management |
| 14 | To be able to communicate verbally and literally |
| 15 | To be able to comprehend planning olive growing and production area |
| 16 | To be able to comprehend knowledge vegetable ecology and protection of environment |

