



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

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|--|---|---|------------|---|---|---------------------------------|---|------------|---|
| Course Title | | Oil Crops | | | | | | | |
| Course Code | | TB310 | | Course Level | | First Cycle (Bachelor's Degree) | | | |
| ECTS Credit | 3 | Workload | 75 (Hours) | Theory | 2 | Practice | 2 | Laboratory | 0 |
| Objectives of the Course | | The importance of vegetable oil for human health, to have basics information about Morphological caharacteristics and production of oil plants grown in Turkey, to determine possibilities of main and second crop oil plants. | | | | | | | |
| Course Content | | Definition of vegetable oil, quality parameters in vegetable oil plants and the factors effecting vegetable oil quality parameters, the production of vegetable oil plants in World and Turkey, production potential of vegetable oil plants of Turkey, to be able to have basic information about growing techniques of vegetable oil plants and potential usage as an raw material of vegetable oil in oil industry | | | | | | | |
| Work Placement | | N/A | | | | | | | |
| Planned Learning Activities and Teaching Methods | | | | Explanation (Presentation), Demonstration, Discussion, Individual Study | | | | | |
| Name of Lecturer(s) | | Prof. Öner CANAVAR | | | | | | | |

Assessment Methods and Criteria

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

Recommended or Required Reading

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| 1 | 1. Arioğlu, H.H., 2000. Yağ Bitkileri Yetiştirme ve Islahı. Ç.Ü. Ziraat Fakültesi Genel Yayın No: 220. Ders Kitapları Yayın No: A-70 |
| 2 | 2. Turan, Z.M., Göksoy, A.T. 1998. Yağ Bitkileri. Uludağ Üniversitesi Ziraat Fakültesi Ders Notları No: 80. |

| Week | Weekly Detailed Course Contents | |
|------|---------------------------------|--|
| 1 | Theoretical | Vegetable oil plants, saturated and unsaturated oil, the production and importance of vegetable oil plants in the World and Turkey |
| | Practice | introduction of plants |
| 2 | Theoretical | Taxonomy, botanical characteristics and adaptation of soybean, fertilization and inoculation of the nitrogen-fixing bacteria, |
| | Practice | literature review |
| 3 | Theoretical | Growing techniques, selection of seed and varieties, harvesting and storage conditions for soybean |
| | Practice | introduction of varieties |
| 4 | Theoretical | Taxonomy, botanical characteristics and adaptation of peanut, fertilization and inoculation of the nitrogen-fixing bacteria, |
| | Practice | introduction of varieties |
| 5 | Theoretical | Growing techniques, selection of seed and varieties, harvesting and storage conditions for peanut |
| | Practice | presentation of instrument equipment |
| 6 | Theoretical | Taxonomy, botanical characteristics and adaptation of sesame |
| | Practice | introduction of varieties |
| 7 | Theoretical | Growing techniques, selection of seed and varieties, harvesting and storage conditions for sesame |
| | Practice | introduction of plant |
| 8 | Intermediate Exam | Mid term |
| 9 | Theoretical | Taxonomy, botanical characteristics, agronomy and adaptation of sunflower |
| | Practice | introduction of plant |
| 10 | Theoretical | Growing techniques, selection of seed and varieties, planting, harvesting and storage conditions for sunflower |
| | Practice | introduction in field experiments |
| 11 | Theoretical | Taxonomy, botanical characteristics and adaptation of rapeseed |
| | Practice | introduction of plant |
| 12 | Theoretical | Growing techniques, selection of seed and varieties, planting, harvesting and storage conditions for rapeseed |



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|----|-------------|---|
| 13 | Theoretical | Adaptation, growing techniques, selection of seed and varieties, planting, harvesting and storage conditions for safflower |
| | Practice | introduction of plant |
| 14 | Theoretical | Taxonomy, botanical characteristics and adaptation planting, harvesting and storage conditions for hashish (<i>Papaver somniferum</i> L.), |
| | Practice | introduction of plant |
| 15 | Theoretical | Taxonomy, botanical characteristics and adaptation planting, harvesting and storage conditions for Oiled linen (<i>Linum usitatissimum</i> L.) |
| | Practice | literature review |
| 16 | Final Exam | Final exam |

Workload Calculation

| Activity | Quantity | Preparation | Duration | Total Workload |
|--|----------|-------------|----------|----------------|
| Lecture - Theory | 14 | 0 | 2 | 28 |
| Lecture - Practice | 14 | 0 | 2 | 28 |
| Midterm Examination | 1 | 7 | 2 | 9 |
| Final Examination | 1 | 8 | 2 | 10 |
| 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 | 1. To be able to comprehend the importance of vegetable oil plants proving raw material to oil industry |
| 2 | 2. To be able to improve growing techniques of vegetable oil plants to increase yield and quality |
| 3 | 3. To be able to observe problems encountered during growing of vegetable oil plants and to suggest an idea to solve problems |
| 4 | 4. To be able to determine regions having high production potential of vegetable oil plants |
| 5 | 5. To be able to suggest appropriate models and the presentation of results as a report |

Programme Outcomes (Agricultural Biotechnology)

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|---|--|
| 1 | To be able to develop skills in identifying, modeling and solving problems in agricultural biotechnology |
| 2 | To be able to synthesize life and engineering sciences for the effective resource planning of agricultural biotechnology applications |
| 3 | To be able to interpret about living organisms structure, metabolic and physiological processes in order to propose biotechnological solutions to the agricultural problems |
| 4 | To be able to analyze genomic, metabolomic and proteomic information via bioinformatic tools. |
| 5 | To have the ability to analyze collected data and interpret the results. |
| 6 | To have the ability of individual working ability and to make independent decisions, to work in inter-disciplinary and interdisciplinary teamwork, to communicate by expressing their ideas orally and in writing, clearly and concisely |
| 7 | To have the awareness of professional liabilities and ethics |
| 8 | To be able to follow current national and international problems |

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 | 4 | 3 | 4 | 4 |
| P2 | 3 | 3 | 3 | 4 | 3 |
| P3 | 3 | 4 | 3 | 4 | 3 |
| P4 | 3 | 4 | 4 | 2 | 3 |
| P5 | 5 | 5 | 5 | 2 | 5 |
| P6 | 4 | 5 | 4 | 2 | 4 |
| P7 | 4 | 3 | 3 | 5 | 4 |
| P8 | 4 | 3 | 3 | 5 | 5 |

