# AYDIN ADNAN MENDERES UNIVERSITY
# COURSE INFORMATION FORM

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Course Title | Sustainable Agriculture Practices | | | | | | | | |
| Course Code | TB112 | | Couse Level | First Cycle (Bachelor's Degree) | | | | | |
| ECTS Credit | 2 | Workload | 50 *(Hours)* | Theory | 2 | Practice | 0 | Laboratory | 0 |
| Objectives of the Course | Agro-Technique use in Sustainable Agriculture for high yield and product quality in accordance with the safety of the environmental balance | | | | | | | | |
| Course Content | Acquisition of sustainability awareness in agriculture by preserving the soil-plant and environment balance together with the octopus systems. Points to note in the octopus systems, ensuring sustainability in agricultu | | | | | | | | |
| Work Placement | N/A | | | | | | | | |
| Planned Learning Activities and Teaching Methods | Explanation (Presentation), Discussion, Case Study | | | | | | | | |
| Name of Lecturer(s) | Prof. Osman EREKUL | | | | | | | | |

| **Assessment Methods and Criteria** | | |
|---|---|---|
| Method | Quantity | Percentage (%) |
| Midterm Examination | 1 | 40 |
| Final Examination | 1 | 70 |

| **Recommended or Required Reading** | |
|---|---|
| 1 | Sustainable Agriculure, Second Edition, J. Mason, 2003, 209 p |
| 2 | Ökologischer Landbau, Grundwissen für die Praxis, Herrmann a. Plakolm, 1991, 428 p. |
| 3 | Sürdürülebilir Tarım konusunda yapılmış yabancı dilde yayınlar |

| Week | Weekly Detailed Course Contents | |
|---|---|---|
| 1 | Theoretical | Characterization of sustainable agriculture, introduction and comparison with other agricultural systems |
| 2 | Theoretical | Sustainable consepts in agriculture |
| 3 | Theoretical | Fertilizition in sustainable agriculture |
| 4 | Theoretical | Crop rotation in sustainable agriculture |
| 5 | Theoretical | Soil tillage in sustainable agriculture |
| 6 | Theoretical | Irrigation in sustainable agriculture |
| 7 | Theoretical | Relations between soil fertility and sustainable agriculture |
| 8 | Intermediate Exam | Midterm exam |
| 9 | Theoretical | Developing of organic matter in sustainable agricultural systems |
| 10 | Theoretical | Managing plants , crops and pastures |
| 11 | Theoretical | Soil fertility - product physiology – yield and quality interrelationships |
| 12 | Theoretical | Improve of the yield of some culture plants in the frame of sustainable agriculure uses |
| 13 | Theoretical | Improve of the product quality of some culture plants in the frame of sustainable agriculture |
| 14 | Theoretical | lesson |
| 15 | Theoretical | Presentation of assignments |
| 16 | Final Exam | Final exam |

| **Workload Calculation** | | | | |
|---|---|---|---|---|
| Activity | Quantity | Preparation | Duration | Total Workload |
| Lecture - Theory | 14 | 1 | 1 | 28 |
| Midterm Examination | 1 | 8 | 2 | 10 |
| Final Examination | 1 | 10 | 2 | 12 |
| | | | Total Workload (Hours) | 50 |
| | | | [Total Workload (Hours) / 25*] = **ECTS** | 2 |
| **25 hour workload is accepted as 1 ECTS* | | | | |

| Learning Outcomes | |
|---|---|
| 1 | Relationship between yield and soil in sustainable agriculture |
| 2 | Fertilization, irrigation, soil cultivation and crop rotation |
| 3 | Improve productivity in sustainable agriculture |
| 4 | Improve product quality in sustainable agriculture |
| 5 | Evaluation of the relationship between yield and quality in sustainable agriculture |

| **Programme Outcomes** *(Agricultural Biotechnology)* | |
|---|---|
| 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 | 4 | 3 | 3 | 3 | 5 |
| P2 | 5 | 3 | 4 | 4 | 4 |
| P3 | 3 | 4 | 3 | 5 | 4 |
| P4 | 4 | 5 | 4 | 4 | 3 |
| P5 | 3 | 4 | 5 | 3 | 3 |
| P6 | 4 | 3 | 4 | 4 | 4 |
| P7 | 5 | 3 | 3 | 3 | 3 |
| P8 | 4 | 4 | 3 | 4 | 4 |