

### AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

| Course Title Irrigation of Agricultural Crops  |   |        |                                   |          |               |                    |       |
|--|---|--------|-----------------------------------|----------|---------------|--------------------|-------|
| Course Code  | ZTY532 Couse Level Second Cycle (Master's Degree) |        |                                   |          |               |                    |       |
| ECTS Credit 8  | Workload 200 (Hours)                              | Theory | 2                                 | Practice | 2             | Laboratory         | 0     |
| Objectives of the Course Basic principles of irrigation and irrigation scheduling of culture crops, description of culture crops, Information about the climate and soil characteristics of some culture crops, Information about the nutricients and salt tolerance of some culture crops, Information about kc,irrigation water requirements, evapotranspiration, irrigation programmes and methods, yield response to water |   |        |                                   |          |               | ne                 |       |
| Course Content Basic principles of irrigation and irrigation scheduling of culture crops, Irrigation of pastura, forage, cere fiber, sugarbeets, oil, fruits, grapes, and etc. crops   |   |        |                                   |          | ge, cereal    |                    |       |
| Work Placement N/A   |   |        |                                   |          |               |                    |       |
|  |   |        | tion (Presentat<br>roblem Solving |          | on, Project E | Based Study, Indiv | idual |
| Name of Lecturer(s)  | Prof. Necdet DAĞDELEN                             |        |                                   |          |               |                    |       |

### **Assessment Methods and Criteria**

| Method              | Quantity | Percentage (%) |    |
|---------------------|----------|----------------|----|
| Midterm Examination |          | 1              | 40 |
| Final Examination   |          | 1              | 60 |

#### **Recommended or Required Reading**

| 1 | Güngör, Y., Erözel, A.Z., Yıldırım O., 2004. Irrigation (Sulama), Ankara Üniversitesi Ziraat Fakültesi Tarımsal Yapılar ve<br>Sulama Bölümü, Yayın No: 1540, 493, Ankara |
|---|--|
| 2 | Kanber, R., 1999. Irrigation (Sulama), Çukurova Üniversitesi Ziraat Fakültesi Yayınları 174, Ders Kitapları Yayın No: A-52, Adana  |
| 3 | Yield Response to Water (FAO 33, Irrigation and Drainage Paper)  |

| Week | Weekly Detailed Cour | eekly Detailed Course Contents   |  |  |  |  |  |
|------|----------------------|--|--|--|--|--|--|
| 1    | Theoretical          | Properties of plants regarding to irrigation and their classifications |  |  |  |  |  |
| 2    | Theoretical          | Irrigation scheduling and main principles                              |  |  |  |  |  |
| 3    | Theoretical          | Irrigation methods   |  |  |  |  |  |
| 4    | Theoretical          | Summer and winter cereals  |  |  |  |  |  |
| 5    | Theoretical          | Industrical crops-1  |  |  |  |  |  |
| 6    | Theoretical          | Industrical crops-2  |  |  |  |  |  |
| 7    | Theoretical          | Industrial crops and irrigation techniques-1                           |  |  |  |  |  |
| 8    | Theoretical          | Industrial crops and irrigation techniques-2                           |  |  |  |  |  |
| 9    | Intermediate Exam    | Midterm exam   |  |  |  |  |  |
| 10   | Theoretical          | Range&Meadow and Forage Crops and irrigation                           |  |  |  |  |  |
| 11   | Theoretical          | Vegetables and industrial crops irrigation techniques-1                |  |  |  |  |  |
| 12   | Theoretical          | Vegetables and industrial crops irrigation techniques-2                |  |  |  |  |  |
| 13   | Theoretical          | Irrigation of Leaf-Shed Fruit Trees                                    |  |  |  |  |  |
| 14   | Theoretical          | Irrigation of Non-Leaf-Shed Fruit Trees                                |  |  |  |  |  |
| 15   | Theoretical          | Grape irrigation and design techniques                                 |  |  |  |  |  |
| 16   | Final Exam           | Final Exam   |  |  |  |  |  |

# **Workload Calculation**

| Activity            | Quantity | Preparation | Duration | Total Workload |
|---------------------|----------|-------------|----------|----------------|
| Lecture - Theory    | 14       | 5           | 2        | 98             |
| Lecture - Practice  | 14       | 4           | 2        | 84             |
| Midterm Examination | 1        | 6           | 2        | 8              |



|   |   |   |                  |                             | Course mormation For |
|---|---|---|------------------|-----------------------------|----------------------|
| Final Examination                       | 1 |   | 8                | 2                           | 10                   |
|   |   |   | To               | otal Workload (Hours)       | 200                  |
|   |   | [ | Total Workload ( | Hours) / 25*] = <b>ECTS</b> | 8                    |
| *25 hour workload is accepted as 1 ECTS |   |   |                  |                             |                      |
|   |   |   |                  |                             |                      |
| Learning Outcomes                       |   |   |                  |                             |                      |

| 1 | Identifying some culture crops   |
|---|--|
| 2 | Understanding the climate, soil characteristics, nutricients and salt tolerance of some culture crops                |
| 3 | To be able to identify irrigation water requirements, evapotranspiration, irrigation programmes and methods,         |
| 4 | Determine irrigation water stress level and yield response factor of culture crops and analyze water-yield relations |
| 5 | To be able to identify plant growth stages and periods and determine plant growth coeeficients (kc)                  |

# Programme Outcomes (Agricultural Structures and Irrigation Master)

| _ |  |
|---|--|
| 1 | Ability to use, evaluate and improve the knowledge gained from field of study at an expert level           |
| 2 | Ability to reach necessary the knowledge   |
| 3 | To able to conduct scientific studies (research) related to the field                                      |
| 4 | Ability to consider academical and ethical values the studies  |
| 5 | Ability to improve editing method and evaluate the results of researches                                   |
| 6 | The studies, the ability to reach result and application, develop new approaches                           |
| 7 | A topic in the field of written, verbally and visually as the ability to express                           |
| 8 | Effective use of Turkish language and ability to communicate in a foreign language both written and verbal |
|   |  |

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