



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

|  |   |   |             |   |   |                                |   |            |   |
|--|---|---|-------------|---|---|--------------------------------|---|------------|---|
| Course Title                                     |   | Monitoring and Evaluation in Irrigation Schemes   |             |   |   |                                |   |            |   |
| Course Code                                      |   | ZTY541  |             | Course Level  |   | Second Cycle (Master's Degree) |   |            |   |
| ECTS Credit                                      | 8 | Workload  | 200 (Hours) | Theory  | 3 | Practice                       | 0 | Laboratory | 0 |
| Objectives of the Course                         |   | The concept of monitoring and evaluation in irrigation schemes, application of monitoring and evaluation program  |             |   |   |                                |   |            |   |
| Course Content                                   |   | Introduction to irrigation schemes, the concept of monitoring and evaluation, performance evaluation and performance indicators, data acquisition and preparing the monitoring and evaluation program, evaluation of water use efficiency, physical efficiency, environmental, economical and institutional efficiency, interpretation of monitoring and evaluation results |             |   |   |                                |   |            |   |
| Work Placement                                   |   | N/A   |             |   |   |                                |   |            |   |
| Planned Learning Activities and Teaching Methods |   |   |             | Explanation (Presentation), Discussion, Case Study, Individual Study, Problem Solving |   |                                |   |            |   |
| Name of Lecturer(s)                              |   | Prof. Selin Muradiye AKÇAY  |             |   |   |                                |   |            |   |

### Assessment Methods and Criteria

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

### Recommended or Required Reading

|   |   |
|---|---|
| 1 | Bos, M.G., M. A. Burton and D.J. Molden, 2005. Irrigation and Drainage Performance Assessment: Practical Guidelines, CABI Publishing. |
| 2 | Malano, H.M. and P.J.M. van Hofwegen, 2006. Management of Irrigation and Drainage Systems, IHE Monograph 3. Taylor and Francis.       |
| 3 | Svendsen, M., 2005, Irrigation and River Basin Management, Options for Governance and Institution. CABI Publishing                    |

| Week | Weekly Detailed Course Contents |  |
|------|---------------------------------|--|
| 1    | Theoretical                     | Introduction to irrigation schemes   |
| 2    | Theoretical                     | The aim of monitoring and evaluation in irrigation schemes                           |
| 3    | Theoretical                     | Performance evaluation and performance indicators                                    |
| 4    | Theoretical                     | The types of performance indicators and internal and external performance evaluation |
| 5    | Theoretical                     | Data acquisition for monitoring and evaluation purposes                              |
| 6    | Theoretical                     | Preparing the performance evaluation programme                                       |
| 7    | Theoretical                     | Evaluation of water use efficiency in irrigation schemes                             |
| 8    | Intermediate Exam               | MIDTERM EXAM   |
| 9    | Theoretical                     | Evaluation of physical and environmental efficiency in irrigation schemes            |
| 10   | Theoretical                     | Evaluation of economic and institutional efficiency in irrigation schemes            |
| 11   | Theoretical                     | Performance evaluation on spatial and temporal basis                                 |
| 12   | Theoretical                     | Comparative performance evaluation (benchmarking) in irrigation schemes              |
| 13   | Theoretical                     | Interpretation of monitoring and evaluation results                                  |
| 14   | Theoretical                     | General Review   |
| 15   | Final Exam                      | Final Exam   |

### Workload Calculation

| Activity                              | Quantity | Preparation | Duration | Total Workload |
|---------------------------------------|----------|-------------|----------|----------------|
| Lecture - Theory                      | 14       | 10          | 3        | 182            |
| Midterm Examination                   | 1        | 6           | 2        | 8              |
| Final Examination                     | 1        | 8           | 2        | 10             |
| Total Workload (Hours)                |          |             |          | 200            |
| [Total Workload (Hours) / 25*] = ECTS |          |             |          | 8              |

\*25 hour workload is accepted as 1 ECTS



**Learning Outcomes**

|   |  |
|---|--|
| 1 | Learning the concept of monitoring and evaluation in irrigation schemes                    |
| 2 | Learning the concept of performance evaluation and performance indicators                  |
| 3 | The ability to collect data in order to implement a performance evaluation program         |
| 4 | The ability to evaluate the performance of a given irrigation schemes in different aspects |
| 5 | The ability to interpret the outputs of evaluation program and make recommendations        |

**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 | 5  | 5  | 5  | 5  | 5  |
| P2 | 5  | 5  | 5  | 5  | 5  |
| P3 | 5  | 5  | 5  | 5  | 5  |
| P4 | 5  | 5  | 5  | 5  | 5  |
| P5 | 5  | 5  | 5  | 5  | 5  |
| P6 | 5  | 5  | 5  | 5  | 5  |
| P7 | 5  | 5  | 5  | 5  | 5  |
| P8 | 5  | 5  | 5  | 5  | 5  |

