

## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

| Course Title The Preparation and Evaluation of Agricultural Research Projects   |                      |  |                   |                 |                     |                    |   |
|---|----------------------|--|-------------------|-----------------|---------------------|--------------------|---|
| Course Code ZTB517  |                      | Couse Level Second Cycle (Master's Degree) |                   | Degree)         |                     |                    |   |
| ECTS Credit 8   | Workload 206 (Hours) | Theory                                     | 2                 | Practice        | 2                   | Laboratory         | 0 |
| Objectives of the Course  The course objectives are to provide basic information and skills in terms of the preparation, management and writing of final report of an agricultural research project |                      |  |                   |                 |                     |                    |   |
| Course Content Determination of project pha   |                      | ases, conclude                             | and the           | evaluation of v | vritten and c       | oral presentation. |   |
| Work Placement N/A  |                      |  |                   |                 |                     |                    |   |
| Planned Learning Activities   | Explanation (F Study | resenta                                    | tion), Discussion | on, Project E   | Based Study, Indivi | dual               |   |
| Name of Lecturer(s)   | Prof. Osman EREKUL   |  |                   |                 |                     |                    |   |

| Assessment Methods and Criteria |          |                |  |  |
|---------------------------------|----------|----------------|--|--|
| Method                          | Quantity | Percentage (%) |  |  |
| Midterm Examination             | 1        | 40             |  |  |
| Final Examination               | 1        | 60             |  |  |

## **Recommended or Required Reading**

Açıkgöz N. 1993. Research and Experimental Methods in Agriculture (III. Article). Ege Faculty of Agriculture Publications No: 478

| Week | <b>Weekly Detailed Cour</b> | se Contents  |
|------|-----------------------------|--|
| 1    | Theoretical                 | Basic concepts about experimental designs and analysis   |
|      | Practice                    | Literature search  |
| 2    | Theoretical                 | Variance analysis and explanations of one factorial experiment: analysis and interpretation results obtained from completely randomized plot design and randomized block design. |
|      | Practice                    | Sample problem solution  |
| 3    | Theoretical                 | Variance analysis and explanations of one factorial experiment: analysis and interpretation results obtained from augmented design.  |
|      | Practice                    | Sample problem solution  |
| 4    | Theoretical                 | Variance analysis and explanations of two factorial experiment: analysis and interpretation results obtained from split-plot design  |
| 5    | Theoretical                 | Variance analysis and explanations of two factorial experiment: analysis and interpretation results obtained from split-plot design  |
|      | Practice                    | Sample problem solution  |
| 6    | Theoretical                 | Variance analysis and explanations of two factorial experiment: analysis and interpretation results obtained from split-plot design  |
|      | Practice                    | Sample problem solution  |
| 7    | Theoretical                 | Multi-characterized analysis: correlation coefficient and significance test, simple multiple correlation coefficient   |
|      | Practice                    | Sample problem solution  |
| 8    | Intermediate Exam           | MidTerm Exam   |
| 9    | Theoretical                 | Factors and path analysis, application of path analysis in field crop cultivation and breeding   |
|      | Practice                    | Sample problem solution  |
| 10   | Theoretical                 | Regression coefficients and significance test, and regression models.  |
|      | Practice                    | Sample problem solution  |
| 11   | Theoretical                 | Using a regression model to estimate yield and genotype x environment interaction  |
|      | Practice                    | Sample problem solution  |
| 12   | Theoretical                 | Analysis of data with SAS software package   |
|      | Practice                    | Sample problem solution  |
| 13   | Theoretical                 | Analysis of data with SPSS software package  |
|      | Practice                    | Sample problem solution  |
| 14   | Theoretical                 | Analysis of data with JMP software package   |



| 14 | Practice    | Sample problem solution                               |
|----|-------------|---|
| 15 | Theoretical | Interpretation of the results of statistical analysis |
|    | Practice    | Sample problem solution                               |
| 16 | Final Exam  | Final exam  |

| doad Calculation   |          |                      |   |                |  |  |
|--|----------|----------------------|---|----------------|--|--|
| ty   | Quantity | Preparation Duration |   | Total Workload |  |  |
| ire - Theory   | 14       | 2                    | 2 | 56             |  |  |
| re - Practice  | 14       | 2                    | 2 | 56             |  |  |
| nment  | 14       | 1                    | 1 | 28             |  |  |
| ing  | 15       | 0                    | 2 | 30             |  |  |
| rm Examination   | 1        | 12                   | 2 | 14             |  |  |
| Examination  | 1        | 20                   | 2 | 22             |  |  |
| Total Workload (Hours)   |          |                      |   |                |  |  |
| [Total Workload (Hours) / 25*] = <b>ECTS</b>   |          |                      |   |                |  |  |
| [Total Workload (Hours) / 25*] = <b>ECTS</b> *25 hour workload is accepted as 1 ECTS |          |                      |   |                |  |  |

| Learning Outcomes |   |  |  |  |  |
|-------------------|---|--|--|--|--|
| 1                 | Discuss a problem as a research project   |  |  |  |  |
| 2                 | Determination of project stages   |  |  |  |  |
| 3                 | Students learn approaches about analysis of the data obtained from experiments and interpretation of results. |  |  |  |  |
| 4                 | Obtaining the results   |  |  |  |  |
| 5                 | Publication of experiment results and making presentation about project.                                      |  |  |  |  |

| Progr | ramme Outcomes (Field Crops Master)   |  |  |  |  |  |
|-------|---|--|--|--|--|--|
| 1     | To be able to improve and deepen the level of expertise in field crops on the basis of the departments licenses qualifications.   |  |  |  |  |  |
| 2     | To be able to recognize the subjects related to field crops, to be able to solve these and make interpretation.   |  |  |  |  |  |
| 3     | To be able to have the skills of acting independently, to have power to decide and to create.   |  |  |  |  |  |
| 4     | To be able to work in teams between departments   |  |  |  |  |  |
| 5     | To be able to give briefing about latest information of Field Crops in written, oral and visual ways.   |  |  |  |  |  |
| 6     | To be able to take responsibility for developing the new approaches and to formulate a solution facing unforeseen complex situations of applications,   |  |  |  |  |  |
| 7     | To be able to defend the original opinions in both Turkish and in foreign languages by using these languages and communicating effectively.   |  |  |  |  |  |
| 8     | To be able to contribute to science by producing knowledge for the aim of improving quality, efficiency and sustainability  |  |  |  |  |  |
| 9     | To be able to apply breeding methods in order to improve new varieties for Field Crops.   |  |  |  |  |  |
| 10    | To be able to maintain and select the appropriate statistical methods within the framework of the study, evaluation of scientific ethics; to convert the results into a report/dissertation and to offer them by producing scientific publications. |  |  |  |  |  |

## 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  |
| P9  | 5  | 5  | 5  | 5  | 5  |
| P10 | 5  | 5  | 5  | 5  | 5  |

