



AYDIN ADNAN MENDERES UNIVERSITY
GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES
FIELD CROPS
FIELD CROPS
FIELD CROPS MASTER
COURSE INFORMATION FORM

| | | | | | | | | | |
|--|---|--------------|-------------|--------|--------------------------------|----------|---|------------|---|
| Course Title | Plant Fibres and Control of Quality | | | | | | | | |
| Course Code | ZTB507 | Course Level | | | Second Cycle (Master's Degree) | | | | |
| ECTS Credit | 8 | Workload | 203 (Hours) | Theory | 2 | Practice | 2 | Laboratory | 0 |
| Objectives of the Course | To ensure the learning the fiber quality control and standardization used by observation of the structure of plant fibers | | | | | | | | |
| Course Content | Classification of plant fibers, The anatomic structure of plant fibre and formation of plant fibre, fiber quality characteristics, standardization and quality control. | | | | | | | | |
| Work Placement | N/A | | | | | | | | |
| Planned Learning Activities and Teaching Methods | Explanation (Presentation), Demonstration, Discussion, Project Based Study | | | | | | | | |
| Name of Lecturer(s) | | | | | | | | | |

Assessment Methods and Criteria

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

Recommended or Required Reading

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| 1 | Gordon, S. 2006, Cotton: Science and Technology. ISBN: 1 84569 026 |
| 2 | Gupta, V. B., Agrawa, K. A, and Jassal. M. 2006 Elements of fibre science. India Institute of technology ISBN: 1 84569 045 1 |
| 3 | Hearl, S. W. J. 2001. High performance fibres. UK. ISBN: 1 85573 5393 |
| 4 | Kohel, R. J., Lewis, C.F., 1984.Cotton.American Society of Agronomy Inc., No:24 |

| Week | Weekly Detailed Course Contents | |
|------|---------------------------------|---|
| 1 | Theoretical | The classification and importance of plant fibres |
| | Preparation Work | Presentation of the fibers |
| 2 | Theoretical | The anatomic structure of fibre formation (seed and fruit fibres) |
| 3 | Theoretical | The anatomic structure of fibre formation (stalk and leaf fibres) |
| | Preparation Work | The research in laboratory |
| 4 | Theoretical | The chemical structure of plant fibres |
| | Preparation Work | The research in laboratory |
| 5 | Theoretical | Fiber quality characteristics (length, fineness, strength) |
| | Preparation Work | The research in laboratory |
| 6 | Theoretical | The research in laboratory |
| | Preparation Work | The research in laboratory |
| 7 | Preparation Work | Term paper |
| 8 | Intermediate Exam | Midterm Exam |
| 9 | Theoretical | Fiber quality properties and environment |
| 11 | Theoretical | Fiber contamination |
| | Preparation Work | Literature review |
| 12 | Theoretical | Standardization of cotton fiber in Turkey |
| | Preparation Work | The research in gin factory |
| 13 | Theoretical | Control of cotton bales |
| 14 | Theoretical | Problems of standardization and control of cotton bales |
| | Preparation Work | The research in gin factory |
| 15 | Theoretical | The standartization of other plant fibres and quality control |
| | Preparation Work | Literature reviewing |
| 16 | Final Exam | Final Exam |



Workload Calculation

| Activity | Quantity | Preparation | Duration | Total Workload |
|---------------------------------------|----------|-------------|----------|----------------|
| Lecture - Theory | 14 | 2 | 2 | 56 |
| Lecture - Practice | 14 | 2 | 2 | 56 |
| Assignment | 1 | 30 | 0 | 30 |
| Term Project | 1 | 30 | 0 | 30 |
| Midterm Examination | 1 | 12 | 2 | 14 |
| Final Examination | 1 | 15 | 2 | 17 |
| Total Workload (Hours) | | | | 203 |
| [Total Workload (Hours) / 25*] = ECTS | | | | 8 |

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

| | |
|---|--|
| 1 | To be able to evaluate the importance of plant fibers |
| 2 | To be able to synthesise the obtained techniques of quality and productive plant fibre |
| 3 | To be able to evaluate the importance of standardization and quality control |
| 4 | To be able to solve the problems in standardization |
| 5 | To be able to solve the problems in quality control |

Programme 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 | 4 | 4 | 4 | 4 | 5 |
| P2 | 5 | 5 | 5 | 5 | 5 |
| P3 | 4 | 4 | 4 | 4 | 5 |
| P4 | 3 | 3 | 3 | 3 | 5 |
| P5 | 4 | 4 | 4 | 4 | 5 |
| P6 | 4 | 4 | 4 | 4 | 5 |
| P7 | 5 | 5 | 5 | 5 | 5 |
| P8 | 4 | 5 | 4 | 5 | 5 |
| P9 | 5 | 5 | 5 | 5 | 5 |
| P10 | 5 | 5 | 5 | 5 | 5 |

