

## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

| Course Title  | Agricultural Machinery Management and Planning   |            |  |     |          |   |            |   |
|---|--|------------|--|-----|----------|---|------------|---|
| Course Code   | ourse Code TAM236 Couse Level Short Cycle (Associate's Degree)   |            | Degree)  |     |          |   |            |   |
| ECTS Credit 2   | Workload   | 50 (Hours) | Theory   | 2   | Practice | 0 | Laboratory | 0 |
| Objectives of the Course Calculation of business success and the costs in agricultural enterprises, mechanization planning. |  |            |  | ng. |          |   |            |   |
| Course Content  | ontent Mechanization in Turkish and the World agriculture. Importance and necessity of mechanization planning. Operation planning of mechanization. Make economic analyses of agricultural tools and machines. Explain business success of agricultural tools and machines |            |  |     |          |   |            |   |
| Work Placement  | N/A  |            |  |     |          |   |            |   |
| Planned Learning Activities and Teaching Methods  |  |            | Explanation (Presentation), Discussion, Project Based Study, Individual Study, Problem Solving |     |          |   |            |   |
| Name of Lecturer(s)   |  |            |  |     |          |   |            |   |

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

## **Recommended or Required Reading**

- Sezer, S., Engürülü, B., Çiftçi, Ö., Gölbaşı, M., Başaran, H.Ç. ve Yılmaz, H., 2006. Tarım Makineleri İşletmeciliği.Republic of Turkey Ministry of Food, Agriculture and Livestock Ankara Zirai Üretim İşletmesi, Personel ve Makine Eğitim Merkezi Müdürlüğü, ISBN:975-407-200-0, Ankara.
- 2 Rehber, E., 1987. Tarımsal İşletmecilik ve Planlama. U.Ü.Z.F. Course Book Number: 30, Bursa.
- 3 Erkuş, A. ve Demirci R., 1993. Tarımsal İşletmecilik ve Planlama. A.Ü.Z.F. Press Number: 944, Ankara.

| Week | <b>Weekly Detailed Cour</b> | se Contents  |  |  |  |  |
|------|-----------------------------|--|--|--|--|--|
| 1    | Theoretical                 | Introduction the course and general information about the teaching aids        |  |  |  |  |
|      | Preparation Work            | Examining course contents  |  |  |  |  |
| 2    | Theoretical                 | Structure and properties of Turkey's agriculture mechanization                 |  |  |  |  |
|      | Preparation Work            | Literature review about the subject  |  |  |  |  |
| 3    | Theoretical                 | Introduction to basic concepts and relevant planning of agricultural machinery |  |  |  |  |
|      | Preparation Work            | Literature review about the subject  |  |  |  |  |
| 4    | Theoretical                 | The importance of agricultural management and related concepts                 |  |  |  |  |
|      | Preparation Work            | Literature review about the subject  |  |  |  |  |
| 5    | Theoretical                 | Business achievements of agricultural tools and machinery                      |  |  |  |  |
|      | Preparation Work            | Literature review about the subject  |  |  |  |  |
| 6    | Theoretical                 | Time study   |  |  |  |  |
|      | Preparation Work            | Literature review about the subject  |  |  |  |  |
| 7    | Theoretical                 | Calculation of tractor pull bar  |  |  |  |  |
|      | Preparation Work            | Literature review about the subject  |  |  |  |  |
| 8    | Intermediate Exam           | Midterm exam   |  |  |  |  |
| 9    | Theoretical                 | Tractor performance  |  |  |  |  |
|      | Preparation Work            | Literature review about the subject  |  |  |  |  |
| 10   | Theoretical                 | Determining the power requirements of agricultural machines                    |  |  |  |  |
|      | Preparation Work            | Literature review about the subject  |  |  |  |  |
| 11   | Theoretical                 | Mechanization costs  |  |  |  |  |
|      | Preparation Work            | Literature review about the subject  |  |  |  |  |
| 12   | Theoretical                 | Duration of the economic   |  |  |  |  |
|      | Preparation Work            | Literature review about the subject  |  |  |  |  |
| 13   | Theoretical                 | Selection of proper mechanization system                                       |  |  |  |  |
|      | Preparation Work            | Literature review about the subject  |  |  |  |  |
| 14   | Theoretical                 | Models of machine usage  |  |  |  |  |



| 14 | Preparation Work | Literature review about the subject |
|----|------------------|-------------------------------------|
| 15 | Theoretical      | Mechanization planning a business   |
|    | Preparation Work | Literature review about the subject |
| 16 | Final Exam       | Final Exam                          |

| Workload Calculation                           |          |             |          |                |
|--|----------|-------------|----------|----------------|
| Activity                                       | Quantity | Preparation | Duration | Total Workload |
| Lecture - Theory                               | 14       | 0           | 2        | 28             |
| Project  | 2        | 4           | 0        | 8              |
| Midterm Examination                            | 1        | 5           | 1        | 6              |
| Final Examination                              | 1        | 7           | 1        | 8              |
|  | 50       |             |          |                |
| [Total Workload (Hours) / 25*] = <b>ECTS</b> 2 |          |             |          |                |
| *25 hour workload is accepted as 1 ECTS        |          |             |          |                |

| Learning Outcomes |
|-------------------|
|-------------------|

- 1 To be able to comprehend the introduction to Agricultural Mechanization Management
- 2 To be able to organize a mechanization plan
- 3 To be able to calculate economic time usage
- 4 To be able to gain the ability of doing economical analysis and comparing different economical outcomes

## **Programme Outcomes** (Agricultural Machinery)

- To be able to comprehend social, cultural and societal responsibility and keep up with national and international up contemporary issues and developments.
- To be able to be bounded to the Atatürk nationalism, adopted to the national, ethic, spiritual and cultural value of the Turkish Nation, opened to the universal and modern development, adopted the richness, deep seated and productive properties of the Turkish language, having language sympathy and awareness, having reading pleasure and habit and having sufficient foreign language for their vocational necessities, In the directions of the Atatürk Principles and Revolutions,
- To be able to recognize the basic computer hardware and operating systems, knowledge of internet usage being able to prepare documents, electronic tables and presentation by using office programs.
- To be able to be aware of ethic responsibility and vocational profession and to have consciousness of a lifelong learning concept
- To be able to know current vocational issues and to have skill to define and interprete them.
- To be able to be aware of the universal and social dimensional effects in engineering solutions, and to be able to have knowledge about entrepreneurship and newfangleness.
- To recognize the materials which used for preparation of agricultural machinery and have skill for the choosing the appropriate material.
- To be able to acquire the skill of using the necessary tools and equipments which are used in the production and maintenance of agricultural machinery.
- To be able to prepare the agricultural tools and machineries, to determine the breakdowns and to do periodic maintenance and repairs.
- To be able to comprehend the picture of the agricultural tools and machinery and their fabrication, and have the skill to draw them via computer.
- 11 To be aable to assemble and to combine machinery pieces by using demountable and nondetachable junction methods.
- 12 To be able to have the skill of resistance calculations of the agricultural tool and machinery on computer.
- To be able to test and control the suitability of new machines and mechanic equipment to the definite standarts and technical properties.
- 14 To be able to have general knowledge of agricultural production.
- 15 To be able to have knowledge of basic sciences.

## Contribution of Learning Outcomes to Programme Outcomes 1: Very Low, 2:Low, 3:Medium, 4:High, 5: Very High

|    | L1 | L2 | L3 | L4 |
|----|----|----|----|----|
| P4 | 3  | 3  | 3  | 3  |
| P5 | 4  | 5  | 4  | 5  |
| P6 | 3  | 5  | 5  | 4  |

