AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Ergonomics in Agriculture								
Course Code	ZTM508		Couse Level		Second Cycle (Master's Degree)				
ECTS Credit	8	Workload	195 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	The objective of this course is to gain knowledge about Man's physical properties, machinery and human impacts on the environment, load and strain during the study, protection of human health and working conditions for increasing the efficiency of business.								
Course Content	Ergonomics, Ergonomics design factors; Human characteristics (physiological, psychological, and physical) , Work enviromental conditions (Temperature, humidity, noise, vibration, gas, dust, lightening, indoor colour), Anthropometry, Work Safety, workplace hazards, occupational disease. Standards and regulations related to occupational health and safety. Hazards in agriculture; Tractor, Agricultural machinery, Agricultural enviroment, contaminants, Animals, Chemicals, Human factor, Risk management, Protective equipments, Workplace safety posters- warning signs- caution signs. Occupational health conditions and precautions of safety.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Case Study								
Name of Lecturer(s)									

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

Recommended or Required Reading	
1	Ergonominin Temel İlkeleri, Zander, J., (Çeviren; Sabancı, A.) (1996) Ç.Ü. Ziraat Fakültesi Genel Yayın No: 142
2	Ergonomi. Erkan, N., (2003) Milli Prodüktivite Merkezi Yayınları No: 373

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction the course and general information about the teaching aids
	Preparation Work	Research
2	Theoretical	Introduction of ergonomics, ergonomics design factors, human factors
	Preparation Work	Research
3	Theoretical	Metabolism (basal metabolism, workload) (Homework)
	Preparation Work	Research
4	Theoretical	Enviromental conditions and machines (climatic conditions, lighting, indoor colour)
	Preparation Work	Research
5	Theoretical	Enviromental conditions and machines (dust, gas,vibration, noise) (Measuring of noise and vibration, problems related to topic)
	Preparation Work	Research
6	Theoretical	Anthropometry, control panel
	Preparation Work	Research
7	Theoretical	Work safetyand health (Homework)
	Preparation Work	Research
8	Intermediate Exam	Midterm exam
9	Theoretical	Standards and regulations related to occupational health and safety (Homework)
	Preparation Work	Research
10	Theoretical	Occupational disease (Homework)
	Preparation Work	Research
11	Theoretical	Workplace hazards (Homework)
	Preparation Work	Research
12	Theoretical	Quality management on workplace safety (Homework)
	Preparation Work	Research

13	Theoretical	Dangers to be encountered in agriculture (Tractors, agricultural machinery, agricultural environment and waste (gas, dust, contaminants) animals, agricultural chemicals used, the human factor (Homework)
	Preparation Work	Research
14	Theoretical	Evauation of risk, risk management (Homework)
	Preparation Work	Research
15	Theoretical	Protective equipments, occupational health conditions and precautions of safety (Homework and presentation)
	Preparation Work	Research
16	Final Exam	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	4	3	98
Assignment	14	0	2	28
Term Project	1	0	25	25
Midterm Examination	1	20	2	22
Final Examination	1	20	2	22
			Total Workload (Hours)	195
			[Total Workload (Hours) / 25*] = **ECTS**	8

**25 hour workload is accepted as 1 ECTS*

Learning Outcomes

1	Evaluation of conditions to provide combination of enviroment, human and machine
2	To have knowledge about ergonomics, ergonomic design factors and anthropometry
3	Calculations related to evaluation of enviromental conditions.
4	To have knowledge about work safety, work place hazards and occupational disease.
5	To attain knowledge of standards and regulations related to occupational health and safety and evaluation of application on agricultural sector.
6	To have knowledge on risk management, workplace safety, posters- warning signs- caution signs, occupational health conditions and precautions of safety and evaluation of applications.

Programme Outcomes *(Agricultural Machinery Master)*

1	Identification, formulation and solving the problems in the field of Agricultural Machinery
2	The ability to use modern engineering tools and techniques
3	The ability to use the information, which is obtained by following the scientific and technological developments, in the academic life and practice.
4	The ability to evaluate multi-faced relationship between them by understanding interaction among agricultural technology, soil, plants and animals
5	Professionalism and ethical responsibility
6	The ability to work in disciplinary and multi-disciplinary teams
7	The ability to communicate effectively
8	The ability to do research for accessing information and to use data base and other resources
9	The ability to do analyze and interpret the experimental results and the design of experiment
10	The ability to identify and interpret knowledge of current professional issues and events
11	The ability to get aware the universal and social effects of engineering solutions and applications
12	Accordance with the requirements of science and technology, ability to use scientific knowledge creative

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

	L1	L2	L3	L4	L5	L6
P1	5	5	5	3	3	3
P2	5	5	3			4
P3	5	3	3			
P4	5					
P5	3			3	3	3
P6		3				
P8	3	4	4			4

P9			4			
P10	5	4	3	4	4	5
P11	5	3	3		4	4
P12	3		3	3	3	3