



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

Course Title	Starch and Sugar Plants								
Course Code	ZTB528	Course Level			Second Cycle (Master's Degree)				
ECTS Credit	8	Workload	196 (Hours)	Theory	2	Practice	2	Laboratory	0
Objectives of the Course	The evaluation of the last growing techniques, agronomy, physiology and breeding program in starch and sugar plants in Turkey and World. The definition of oilseed quality character								
Course Content	Defination of Tuber plants, origin and taxonomy of potato and sugarbeet crops, agricultural charactersitics. Production techniques of tuber crops,								
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	60

Recommended or Required Reading

1	Algan., N. 2002. Tarla Bitkileri (Endüstri Bitkileri)E:Ü.Ziraat Fakültesi Bornova-İZMİR, 2002.
2	İncekara, F.1965.Niçasta- Şeker Bitkileri ve Islahı. E.Ü.Ziraat Fakültesi Yayın No:101. Bornova –İzmir
3	İncekara, F.1972.Yağ Bitkileri ve Islahı. E.Ü. Ziraat Fakültesi Yayın No:83 Bornova-İZMİR.
4	Esendal, E. 1990. Niçasta Şeker Bitkileri ve Islahı Cilt:1 Ondokuz Mayıs Üniversitesi Samsun

Week	Weekly Detailed Course Contents	
1	Theoretical	Classification of starch and sugar plants
2	Theoretical	Explanation of sowing areas, production and yield of starch and sugar plants in both Turkey and World
3	Theoretical	History, origin, taxonomy of starch and sugar plants
4	Theoretical	Morphology and physiology of starch and sugar plants
5	Theoretical	Suitable climate and soil for starch and sugar plants
6	Theoretical	Cropping system (alternation), soil preparation (tillage)
7	Theoretical	Cultivars, sowing dates, cultural practices
8	Intermediate Exam	Midterm exam
9	Theoretical	Harvesting, importance of starch and sugar plants
10	Theoretical	The operated of starch and sugar
11	Theoretical	The character of starch and sugar plants
12	Theoretical	The character of starch and sugar plants
13	Theoretical	The quality analysis of starch and sugar
14	Theoretical	The standardization of starch and sugar plants
15	Theoretical	The standardization of starch and sugar plants
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	3	20	0	60
Midterm Examination	1	8	1	9



Final Examination	1	14	1	15
			Total Workload (Hours)	196
			[Total Workload (Hours) / 25*] = ECTS	8
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	To be able to determine the value of Starch and Sugar Plants in Turkey and World
2	To be able to comprehend the importance of Starch and Sugar Plants in agriculture production.
3	To be able to solve the problems which come out during potatoes, sweet potato, sugar beet and sugar cane production
4	To be able to reproduce of new suitable models in which project for the properties of plant like potatoes and sugar cane improving using a technology
5	To be able to explain the subjects to choice potatoes or sugar cane cultivars, material supply, production period and economic analysis.
6	To be able to comprehend the production potential and production models on the basis of the Regions

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	L6
P1	4	5	5	4	1	5
P2	4	4	3	4	1	5
P3	5	2	1	5	5	5
P4	1	5	5	4	5	5
P5	5	4	4	4	5	5
P6	4	5	4	5	4	5
P7	1	5	5	4	4	5
P8	5	5	5	4	4	5
P9	5	5	5	5	5	5
P10	5	5	5	5	4	5

