AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Gender Mechanisms in Horticulture								
Course Code	ZBB617		Couse Level	Third Cycle (Doctorate Degree)					
ECTS Credit	8	Workload	200 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	The aim of this course is to introduce different gender (sex) polymorphisms observed in fruit, grape, vegetables, and ornamental plant species belong to horticultural crops; to place of these crops in evolutionary perspectives; to understand their genetical relationships; to evaluate their obtained yield performance due to fruit set; to analyze their economic potentials.								
Course Content	In this course, students, will investigate and learn different flower sex types in different flower structures (inflorescence) and systems during the course.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Individual 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	Beukeboom, L. W., Perrin, N. 2014. The Evolution of Sex Determination. Oxford University Press, Oxford, UK, 221 p.
2	Ainsworth, C. C. 2006. Flowering and Its Manipulation. Blackwell Publishing, Oxford, UK, 304 p.
3	Ainsworth, C. C. 1999. Sex Determination in Plants. BIOS Scientific Publishers, Limited, Oxford, UK, 227 p.
4	Geber, M. A., Dawson, T. E., Delph, L. F. 1999. Gender and Sexual Dimorphism in Flowering Plants. Springer-Verlag, Berlin Heidelberg, Germany. 305 p.
5	Bristow, A. 1978. The Sex Life of Plants. Holt, Reinehart, and Winston Publisher. Austin, TX, USA.
6	Coulter, J. M. 1914. The Evolution of Sex in Plants. The University of Chicago Press, USA. 140 p.
7	Darwin, C. 1877. The different forms of flowers on plants of the same species. John Murray Publication, London, UK. 352+p. http://darwin-online.org.uk/contents.html

Week	**Weekly Detailed Course Contents**	
1	Theoretical	Introduction of the course, reproduction types of plants-asexual, sexual
	Practice	Internet sources
2	Theoretical	Gender mechanisms in plants-hermaphrodite
	Practice	Source book
3	Theoretical	Gender mechanisms in plants- monocy, gynomonocy, andromonocy
	Practice	Kaynak kitaplar
4	Theoretical	Gender mechanisms in plants- diocy, gynodiocy, androdiocy
	Practice	Source book
5	Theoretical	Gender mechanisms in temperate-zone fruit species (stone fruit)
	Practice	Article search
6	Theoretical	Gender mechanisms in temperate-zone fruit species (pome fruit)
	Practice	Article search
7	Theoretical	Gender mechanisms in temperate-zone fruit species (nut fruit)
	Practice	Article search
8	Theoretical	Mid-term exam
9	Theoretical	Gender mechanisms in subtropical and tropical fruit species
	Practice	Article search
10	Theoretical	Gender mechanisms in grapevines and berry fruit species
	Practice	Article search
11	Theoretical	Gender mechanisms in cool-climate vegetable species
	Practice	Article search

12	Theoretical	Gender mechanisms in warm-climate vegetable species
	Practice	Article search
13	Theoretical	Gender mechanisms in perennial ornamental species
	Practice	Article search
14	Theoretical	Gender mechanisms in annual and cut-flower ornamental species
	Practice	Article search
15	Theoretical	Overall evaluation of the course
	Practice	Opinions
16	Theoretical	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	4	3	98
Lecture - Practice	14	3	1	56
Midterm Examination	1	18	2	20
Final Examination	1	24	2	26
			Total Workload (Hours)	200
			[Total Workload (Hours) / 25*] = **ECTS**	8

**25 hour workload is accepted as 1 ECTS*

Learning Outcomes

1	Different reproduction types in plants
2	Importance of gender mechanisms in horticulture
3	Examples of gender mechanisms in horticulture
4	
5	

Programme Outcomes *(Horticulture Doctorate)*

1	To be able to have scientific value on the targeted area, research planning and conducting practices
2	To be able to plan, conduct, coordinate, and apply of research
3	Ability to literature search and record the obtained knowledge systematically
4	Ability to present research results and discussion
5	Ability to write a scientific article
6	Having a status to open-minded for life-long learning

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	5	4	4
P2	4	5	4	4	4
P3	4	4	5	4	4
P4	3	5	5	4	4
P5	3	4	5	4	4
P6	3	4	5	5	5