

AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Plant Growth Regulators								
Course Code		BİO546		Couse Level		Second Cycle (Master's Degree)				
ECTS Credit 4		Workload	100 <i>(Hours)</i>	Theory	/	2	Practice	0	Laboratory	0
Objectives of the Course		Teaching concept of phytohormone, classification of phytohormones and their metabolizm, transporting phytohormones and their general effects								
Course Content		concept of phy phytohormone	ytohormone, c es and their ge	lassifica eneral e	ation ffects	of phytohoi	rmones and th	eir metabolisn	n, transporting	
Work Placement		N/A								
Planned Learning Activities		and Teaching	Methods	Explar	ation	(Presentat	tion), Discussi	on		
Name of Lecturer(s)										

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Plant physiology. Taiz and Zaiger			
2	plant growth regulators Narçın Palavan-Ünsal			
3	lecture notes			

Week	Weekly Detailed Cours	urse Contents				
1	Theoretical	The concept of plant growth regulators. Similarities and differences with animal hormones. Effect of plant growth regulators style				
2	Theoretical	Chemical structure and biosynthesis of plant growth regulators: I. Auxins				
	Preparation Work	article evaluation				
3	Theoretical	Chemical structure and biosynthesis of plant growth regulators: II. Gibberellins				
	Preparation Work	article evaluation				
4	Theoretical	Chemical structure and biosynthesis of plant growth regulators: III. cytokinins				
	Preparation Work	article evaluation				
5	Theoretical	Chemical structure and biosynthesis of plant growth regulators: IV. Absisic acid				
	Preparation Work	article evaluation				
6	Theoretical	Chemical structure and biosynthesis of plant growth regulators: V.Ethylene				
	Preparation Work	article evaluation				
7	Theoretical	Chemical structure and biosynthesis of plant growth regulators: VI. Jasmonic acid				
	Preparation Work	article evaluation				
8	Theoretical	Chemical structure and biosynthesis of plant growth regulators: VII. Salicylates				
	Preparation Work	article evaluation				
9	Theoretical	Chemical structure and biosynthesis of plant growth regulators: VIII. Polyamines				
	Preparation Work	article evaluation				
10	Theoretical	Chemical structure and biosynthesis of plant growth regulators: IX. Brassinosteroids				
	Preparation Work	article evaluation				
11	Theoretical	Effects of plant growth regulators on development of root, stem and leaf				
	Preparation Work	article evaluation				
12	Intermediate Exam	midterm				
13	Theoretical	Effects of plant growth regulators on apical dominancy and water balance				
	Preparation Work	article evaluation				
14	Theoretical	Effects of plant growth regulators on tuber formation, flowering and fruit development				
	Preparation Work	article evaluation				



15	Theoretical	Effects of plant growth regulators on seed development, abscision, senescense and dormancy				
	Preparation Work	article evaluation				

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload			
Lecture - Theory	14	2	2	56			
Assignment	5	2	0	10			
Reading	4	0	2	8			
Midterm Examination	1	10	2	12			
Final Examination	1	12	2	14			
	100						
	[Total Workload (Hours) / 25*] = ECTS						

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

	-	
1	To be able to comprehend structure and features of phytohormones and their roles in plant metabolism	
2	To be able to investigate and comment previous studies on phytohormones	
3	To be able to use knowledge on effect mechanism of phytohormones to solve problems regarding plant biology	
4	To be able to comment on plant life and design new researches	
5	To be able to discuss and prepare presentation via homeworks and oral presentations given during the course.	

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	3	4	3	4
P2	4	3	4	3	4
P3	4	3	4	3	4
P4	4	3	4	3	4
P5	4	3	4	3	4
P6	4	3	4	3	4
P7	4	3	4	3	4
P8	4	3	4	3	4
P9	4	3	4	3	4
P10	4	3	4	3	4

