

AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Plant Fast Pro	pagation Tech	nniques					
Course Code		TBY322		Couse Level		First Cycle (Bachelor's Degree)			
ECTS Credit	ECTS Credit 4		100 <i>(Hours)</i>	Theory	2	Practice	0	Laboratory	2
Objectives of the Course		Students learn classical and modern methods in plant propagation							
Course Content		Plants for the development of external and internal factors Totipotenz bioreactor Tissue culture							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods			Explanation	n (Presentat	ion), Experime	ent, Demonstra	ation, Discussion		
Name of Lecturer(s)		Assoc. Prof. Y	elda EMEK						

Assessment Methods and Criteria

Method		uantity	Percentage (%)	
Final Examination		1	110	

Recommended or Required Reading

1	Lecture notes
2	Bitki Biyoteknolojisi, Rüştü Hatipoğlu, Adana, 2012
3	Dixoon, R.A.1985. Plant Cell culture: a practical approach. IRL Press Limited, England, ISBN 0-947946-22-5

Week	Weekly Detailed Course Contents					
1	Theoretical	The importance of rapid propagation techniques				
2	Theoretical	Vegetative reproduction				
3	Theoretical	Generative reproduction				
4	Theoretical	Hormons and their effect in plant reproduction				
5	Theoretical	Crop Production and properties of the medium				
6	Theoretical	The elements must be included in Basic Nutrition Environment				
7	Theoretical	Medium preparation				
8	Theoretical	Mid-term exam				
9	Theoretical	Totipotency				
10	Theoretical	Organization of plant tissue laboratory used in rapid propagation and sterilization				
11	Theoretical	Plant tissue culture used in plant rapid propagation				
12	Theoretical	Micropropagation techniques for ornamental plants				
13	Theoretical	Micropropagation techniques for ornamental plants 2				
14	Theoretical	Bioreactors				
15	Theoretical	Water culture (hydroponics)				
16	Final Exam	Final exam				

Workload Calculation

Activity	Quantity	Prep	aration	Duration		Total Workload
Lecture - Theory	15		1	2		45
Lecture - Practice	15		1	2		45
Final Examination	1		9	1		10
Total Workload (Hours) 100						
	4					

*25 hour workload is accepted as 1 ECTS

Learning Outcomes				
1	Students learn what's the totipotency			
2	Students describe tissue culture medhods			
3	Bioreaktörlerin kullanımı hakkında bilgi edinir			



Course Information Form

4	Learn the fast propagation of plants in classical production
5	Have knowledge about different agricultural systems such as soilless agriculture

Programme Outcomes (Agricultural Biotechnology)

-	
1	To be able to develop skills in identifying, modeling and solving problems in agricultural biotechnology
2	To be able to synthesize life and engineering sciences for the effective resource planning of agricultural biotechnology applications
3	To be able to interpret about living organisms structure, metabolic and physiological processes in order to propose biotechnological solutions to the agricultural problems
4	To be able to analyze genomic, metabolomic and proteomic information via bioinformatic tools.
5	To have the ability to analyze collected data and interpret the results.
6	To have the ability of individual working ability and to make independent decisions, to work in inter-disciplinary and interdisciplinary teamwork, to communicate by expressing their ideas orally and in writing, clearly and concisely
7	To have the awareness of professional liabilities and ethics
8	To be able to follow current national and international problems

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	1	4	4	1	1	
P2	2	4	4	1	1	
P3	2	4	4	1	1	
P4	1	2	1	1	1	
P5	2	2	3	1 (1	
P6	3	3	3	1	1	
P7	2	2	2	1	2	
P8	2	2	3	1	2	

