AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Seed Biotechnology								
Course Code	TBY407		Couse Level	First Cycle (Bachelor's Degree)					
ECTS Credit	4	Workload	106 *(Hours)*	Theory	2	Practice	0	Laboratory	2
Objectives of the Course	Understanding technologies and applications of seed production to learn high quality seed production technology								
Course Content	Seeds and other crop production, improvement of materials, improvement, giving information on adaptation and production, biotechnological methods can be used to solve problems encountered in agricultural production								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Experiment, Discussion								
Name of Lecturer(s)	Prof. Ahmet OKUMUŞ								

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	30
Final Examination	1	70

Recommended or Required Reading	
1	Lecture notes
2	Lawrence O. Copeland (Author), Miller F. McDonald . 2001.Principles of Seed Science and Technology

Week	Weekly Detailed Course Contents	
1	Theoretical	Seed technology
2	Theoretical	Seed history
3	Theoretical	Seed technology and breeding
4	Theoretical	Seed classification
5	Theoretical	Standardization in seed
6	Theoretical	Seed breeding stages
7	Theoretical	Seed production technology
8	Theoretical	Seed packeting
9	Intermediate Exam	Mid-term exam
10	Theoretical	Effect of humidity and temperature in seeds
11	Theoretical	Spraying in seeds
12	Theoretical	Seed separation technology
13	Theoretical	Storage of seeds
14	Theoretical	New technologies in seed technology
15	Theoretical	Factory in seed technology
16	Final Exam	Final exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	2	56
Lecture - Practice	14	1	2	42
Midterm Examination	1	3	1	4
Final Examination	1	3	1	4
			Total Workload (Hours)	106
			[Total Workload (Hours) / 25*] = **ECTS**	4
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	Understanding of seed technology
2	Understanding of biotechnological methods in seed technology
3	Understanding of standardization in seed technology
4	Learning of seed biochemistry
5	To learn seed dormancy and its effects

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	3	5	3	4	4
P2	3	4	4	5	4
P3	3	4	4	5	4
P4	2	3	2	5	3
P5	2	2	2	2	3
P6	2	3	2	2	2
P7	4	3	2	2	2
P8	2	2	2	2	2