



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Research Methods in Weed Science							
Course Code		ZBK527		Course Level		Second Cycle (Master's Degree)			
ECTS Credit	8	Workload	200 ( <i>Hours</i> )	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		The aim of the course is to examine the methods of laboratory, greenhouse and field conditions related to herbology.							
Course Content		Herbarium making techniques, how to make and assess the survey, how to do germination and dormancy studies, how to make a critical period and economic loss threshold study in the control of weeds, how to make herbicidal activity is understood how to do.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Case Study, Individual Study					
Name of Lecturer(s)		Prof. Mehmet Nedim DOĞAN							

### Assessment Methods and Criteria

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

### Recommended or Required Reading

1	Camper, N.D., 1986. Research Methods in Weed Science. Southern Weed Science Society, 485p.
2	Uygur, F.N., 1991. Herbolojide Araştırma Yöntemleri, Ç.Ü. Fen Bil. Ens. Yardımcı Ders Notu
3	Anonymous, 1996. Ziraî Mücadele Standart İlaç Deneme Metodları (Cilt 3) T.C. Tarım ve Köyişl. Bak. Tarımsal araştırmalar Gen. Müd. Ankara.
4	Anonymous, 2004. Manual for Field Trials in Crop Protection, Syngenta. 444p.

Week	Weekly Detailed Course Contents	
1	Theoretical	Herbarium making techniques
2	Theoretical	Weed species and coincidence frequency and methods of detection of plating areas and table of results
3	Theoretical	Experiment patterns used in Herbology
4	Theoretical	Collection and collection techniques of weed seeds
5	Theoretical	Germination experiments and evaluation of weed seeds
6	Theoretical	Dormancy experiments and evaluation of weed seeds
7	Theoretical	Measurement of ecological factors affecting contamination
8	Intermediate Exam	Midterm
9	Theoretical	Allelopathy studies
10	Theoretical	Points to be considered when applying herbicide
11	Theoretical	Economic damage threshold studies in Herbology
12	Theoretical	Critical Period Studies in Herbology
13	Theoretical	Determination of biological activity of herbicides
14	Theoretical	Overview of chromatographic techniques
15	Theoretical	Overview of the detection of the effect of herbicides on cell components
16	Final Exam	Final Exam

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	2	56
Lecture - Practice	14	3	2	70
Midterm Examination	1	34	1	35



Final Examination	1	38	1	39
Total Workload (Hours)				200
[Total Workload (Hours) / 25*] = ECTS				8
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

1	To learn how to establish and evaluate laboratory, greenhouse and field trials related to herbology
2	To learn how to make a survey
3	To learn how to evaluate and evaluate the critical period and the economic damage threshold study
4	Learning of herbarium making techniques
5	To learn the methods of detection of weed species and coincidence frequency and coating areas

### Programme Outcomes (Plant Protection Master)

1	To develop knowledge and abilities that gained during undergraduate education
2	To gain ability to search and pursue current literature
3	To gain ability to plan and write projects that help solving problems in field of study.
4	To gain ability to conduct research, analyze data, evaluate research results scientifically and prepare reports and thesis writing.
5	Students will be able to learn and apply the laboratory test and analysis methods
6	To recognize occupational and ethical responsibility

### 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	4	5	5
P2	5	5	4	4	5
P3	4	4	5	4	5
P4	4	4	4	4	4
P5	4	4	4	4	5
P6	4	4	4	4	4

