

Course Book

Course Description	The course covers the classification, biology of weeds as well as management of weeds with emphasis on common and noxious weeds of region. The control methods include chemicals as well as cultural, mechanical and biological control on cultivated land.				
Course objectives	1- How to know the different types of weeds. 2- Classification of the weeds according to different types. 3- Explanation and determination of the location of weeds in the field. 4- Knowledge of chemical and biological methods of weeds control.				
Student's obligation	1-Weeds sample collection. 2-Homework. 3-Reports. 4-Seminars. 5-Quis.				
Required Learning Materials	1-Required material for plant drying. 2-Herbicides. 3-Sprayers.				
Evaluation	Task	Weight (Marks)	Due Week	Relevant Learning Outcome	
	Paper Review				
	Assignments	Homework	5	4	5%
		Report	10	2	10%
		Seminar		2	
		Project		1	
		Class Activity	2		2%
	Quiz	8	4	8%	
	Lab.	10	4	10%	
	Midterm Exam	25	2	25%	
	Final Exam	40	2	40%	
Total	100		100%		
Specific learning outcome:	1- Knowing the most important weed plants in the region that are detriment to economic crops.				

	2- Identification of specific methods of herbicides.
12Course References:	<p>1- الجبوري, باقر عبد خلف و غانم سعدالله حساوي و فائق توفيق الجليبي. الادغال وطرق مكافحتها.</p> <p>2- سالم حمادي عنتر. الادغال واساسيات المكافحة.</p> <p>3- الحجازي, محمد عصمت. المكافحة البيولوجية للحشائش.</p> <p>4- Robert L. Zimdahl. 2012. Weeds- crop competition. A Review, 2nd Edition.</p> <p>5- Jaco,W. Weed population spatial pattern formation and implication.</p>

Course topics (Theory)	Week	Learning Outcome
Weeds definition – weeds characteristics.	1	
Characteristics of weed seeds.	2	
Weeds detriment	3	
Naming of weeds plant.	4	
Weeds Classification.	5	
Methods of weeds spread.	6	
Methods of weeds control.	7	
Chemical methods of weeds control.	8	
Biological methods of weeds control.	9	
Herbicide and herbicide classification.	10	
Competition and Allelopathy.	11	
Effect of herbicides residues.	12	

Practical Topics	Week	Learning Outcome
Weeds Classification according of families and Narrow and broad leaves characteristics.	1	
Weeds of Poaceae family.	2	
Weeds of Cupressaceae and Typhaceae families.	3	
Weeds of Fabaceae family.	4	
Weeds of Asteraceae family.	5	
Weeds of Solanaceae and Amarathanceae and families.	6	
Weeds of Umblefereae and Cruciferea families.	7	
Weeds of Malvaceae, Convolvulaceae and Orobanchaceae families.	8	
Mechanical weeds control.	9	
Methods of herbicide uses.	10	
Preparation of herbicide concentration.	11	
Weeds control in field crops.	12	

Questions Example Design

Ministry of High Education and
Scientific Research
Erbil Polytechnic University
Khabat Technical Institute
Department: Plant protection



Subject: Weeds control
Class: 2nd S^{4th}
Cod: WEC402
Time: 1 hour
Date: 06/3/2025

S4-Midterm Examination (2024-2025)

پ1/ پیناسه‌ی نه‌مانه‌ی خواره‌وه بکه:

Herbicides -4 Weeds -3 Competition -2 Allelopathy -1

پ2/ باسی سیفه‌ته‌کان و زیانه‌کانی رووه‌کی بزار بکه.

پ3/ بزاره‌کان چۆن پۆلین ده‌کرین له‌سه‌ر بنه‌مای سووری ژیان باسیان بکه به نمونه‌وه.

پ4/ ناوی زانستی و خیزان و سووری ژیانی نه‌م بزارانه‌ی خواره‌وه بنوسه:

Common reed -1

Canary grass -2

Cocklebur -3

Jimson -4

Carrot -5

Extra notes:

External Evaluator