

Republic of Iraq

The Ministry of Higher
Education

& Scientific Research

بسم الله الرحمن الرحيم



University: Diyala
College: Agriculture
Department: Horticulture and
landscaping
Stage: fourth stage
Lecturer name: mohammed d. abdulhadi
Scientific title: PH.D
Qualification:
Place of work: College of Agriculture

Flow up of implementation celli pass play

Course Instructor	Mohammed D. Abdul Hadi				
E-mail	mohammed.daher@uodiyala.edu.iq				
Title	Horticultural seeds production and storage				
Course Coordinator	First semester (fall)				
Course Objective	The aim of this course is give the students information about the importance of improved seeds and the methods that use to produce and store them, the factors affecting of seed production, germination and extraction, and also aims to ho to maintain its vitality, storage and circulation in the market within the laws and regulations prevailing in Iraq.				
Course Description	The essential details of this course is study the morphological and physiological traits of seeds and recognize the institutions that deal of seed production and introduce the students the feature of every yield that related in production of new plants and varieties, and prepare the fields and storage of vegetables crops.				
Textbook	Vegetable plants production vegetable plans physiology and adaptation				
Course Assessments	Theoretical semester tests %	Practical semester tests %	Quizzes %	Final practical test %	Final Exam %
	(25%)	(10%)	(5%)	20%	(40%)
General Notes	Final grade 100%				

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the week	the date	Topics Covered	Practical Part	Notes
1		Seed definition, fertilization, seed formation, and polyembryony	Recognition of vegetables families and horticultural plants.	
2		Seeds identification (seed morphology, seed autonomy and chemical components of seeds).	Seeds testing and testing tools.,	
3		Seed importance, propagation of vegetable crops, seed orders, production of improved seeds, registration and adoption of varieties....,	Steps of seed testingand recognition of Iraqi and global seed institutions	
4		Institutions of improved seed production	Seed germination testing and measure rate of germination in dishes	
5		Variant and purity of varieties, sustain of breeder seed in self and cross pollination crops.	Seeds weight and purity testing	
6		Field inspection (determine of field state before and after F1, The feature of field inspector, methods of choosing samples	Determination of moisture and chemical content of seeds.,	
7		Factors effect of flowering and seed formation (light, plant age, temperature, photoperiodism and vernalization)	Seed vitality testing by using tetrazolium	
8		Seeds vitality and factors effect of vitality	Seed evaluation	
9		Seeds dormancy (importance of external dormancy and methods to overcome it. The role of light to overcome dormancy, the dormancy in vegetative parts of plant)	Methods of potato seeds production	
10		Seeds preparation (determine of harvest date, drying extraction, grading and packaging of seeds)	Methods of seeds drying.,	
11		Methods of vegetable seeds production (seed to seed, seed propagation, methods of extraction of some vegetables families seeds)	Types of vegetable seeds packaging.	
12		Methods of seeds storage and packaging.	Seeds treating of chemicals in stores to prevent diseases.,	
13		Factors effect on vitality of stored seeds	Practical visiting of seed production institutions.,	
14		Seed pests in field and store	Seeds treating of chemicals in stores to prevent pests.,	
15		Trading and marketing of seeds and laws and regulations that covering them	Practical visiting of seed production institutions	

Teacher's signature
Dr. Mohammad d. abdulhadi
15/1/2025

Dean's signature
Prof. Dr. Raaed Ibrahim Khalil
15/1/2025