

## Flow up of implementation celli pass play

| Course Instructor  | Adnan Ghazi Salman   |            |         |         |            |
|--------------------|--|------------|---------|---------|------------|
| E_mail             | adnanghai@uodiyala.edu.iq  |            |         |         |            |
| Title              | Horticultural seeds production and storage   |            |         |         |            |
| 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 croups.                            |            |         |         |            |
| Prequests          | 1-vegetable production<br>2- plant breeding  |            |         |         |            |
| Textbook           | 1-Vegetable plants production  |            |         |         |            |
| References         | 2- vegetable plans physiology and adaptation   |            |         |         |            |
|                    | Term Tests   | Laboratory | Quizzes | Project | Final Exam |
| Course Assessment  | 25   | 15         |         |         | As (60%)   |
| General Notes      |  |            |         |         |            |

## **Republic of Iraq**

The Ministry Of Higher Education

& Scientific Research



University: Diyala College: Agriculture Department: Horticulture Stage: Forth stage Lecturer name: Adnan Ghazi Qualification: PH.D Place of work: College of Agriculture

| week | Date | Topics Covered  | Practical Part   |
|------|------|---|--|
| 1    |      | Seed definition, fertilization, seed formation, and   | Recognition of vegetables families   |
|      |      | polyembryony.   | 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<br>, seeds orders, production of improved seeds,<br>registration and adoption of varieties                          | Steps of seed testing and recognition<br>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<br>seed in self and cross pollination crops   | Seeds weight and purity testing  |
| 6    |      | Field inspection ( determinate of field state before<br>and after F, I. The feature of field inspector ,<br>methods of choosing samples                             | Determination of moisture and chemical content of seeds                        |
| 7    |      | Factors effect of flowering and seed formation (<br>light, plant age, temperature, photoperiodisim and<br>vernalization   | Seed vitality testing by using tetrazolium pigment                             |
| 8    |      | Seeds vitality and factors effect of vitality   | Seedlings evaluation   |
| 9    |      | Seeds dormancy (importance of external dormancy and methods to overcome it. The role of light to overcome the 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<br>seed, seed propagation, methods of extraction of<br>some vegetables families seeds                                | Types of vegetables 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                             |