Department of Horticulture

College of Agricultural Engineering Sciences

University of Salahaddin

Subject: Summer Vegetable Production /practical part

Course Book – 3rd Year students

Lecturer's name: Dleen Monawar Saeed

BSc, MSc.

Shayma Fathulla Mohammed

BSc, MSc.

Academic Year: 2022/2023 (Spring Semester)

Course Book

1. Course name	Summer Vegetable Production /Practical part
2. Lecturers in charge	Dleen Monawar Saeed Shayma Fathulla Mohammed
3. Department/ College	Horticulture / Agricultural Engineering Sciences
4. Contact	e-mail: dleen.saeed@su.edu.krd e-mail: shayma.mohammed@su.edu.krd
5. Time (in hours) per week	Practice: 3 hours
6. Office hours	Sunday (8:30- 12), Monday(8:30- 11),Tuesday (8:30-2),
7. Course code	
8. Teacher's academic profile	For Further Information, please visit the link below: dleen.saeed@su.edu.krd & shayma.mohammed@su.edu.krd
9. Keywords	Summer Vegetable Production, mulching, Planting of vegetables, Vegetable disease and insects, climatic and environmental requirements, fertilization, irrigation.

10-Course overview:

Vegetables are herbaceous plants that have been part of the human diet from time immemorial. Some are staple foods but most are accessory food stuffs adding variety to meals with their unique flavors and at the same time, adding nutrients necessary for health. Some vegetables are perennials but most are annuals and biennials .Vegetables need attention especially during the cultivation, production, handling, storage, and growing areas.

This course book complies many fundamental issues of vegetable production such as site selection, preparation of land, propagation methods, using of modern techniques and equipment in planting, fertilization, harvesting, storage, marketing, diseases and pest management, that all help the students to get the acquired knowledge about the vegetable production.

11. Course objective:

- To prepare students to successfully grow vegetables commercially.
- To get the important information about vegetables verities and how we can improve and increase the quantity and quality of them.
- To be able to distinguish vegetable crops morphologically and it is benefits for human health

- To get knowledge about environmental and cultural production requirements of vegetables

12. Student's obligation:

Students must take into consideration the presence of them in the class and pay attention to the lecturer and writing notes, and committed to the date and time of exams when it has been fixed and the lecture papers should be with them in the class before the beginning of lectures and the mobiles should be closed.

13. Forms of teaching;

- Lectures (presentation), classroom teaching (class discussion), integrating technology (Google class room and electronic mail).
- Visits to vegetable production sites in Erbil to learn from growers.

14.Assessment scheme:

-Grades of practical part are distributed as following:

- Two seasonal exams 25 mark
- Quizzes, reports and student activity 10 mark

15. Student learning outcome:

With successful completion of this course, the student will obtain the following learning outcomes:
1-Demonstrate proficiency in the cultural and management considerations of successful
2-sustainable vegetable crop production.
3-Be familiar with the physiological aspects of vegetable crops growth and development.
4-Be familiar with vegetable crops environmental modification and plastic culture systems.
5-Be familiar with successful vegetable crops harvest and marketing.

16. Course Reading List and References

-Abdel Moneim, A. Technology for Producing Vegetables Fundamentals of Horticulture, 4th editions

-Delate, K. et al. 2008. Evaluation of Soil Amendments in Organically Managed Peppers and Tomatoes – Armstrong Trial, 2008. Iowa State University. Vol. 13.

- Matloub, A. W., E. S. Mohammed and K. S. Abdul (1989). Vegetable crop production. 1st part 2nd edition. Ministry of higher Education and Scientific Research. Mosul University – Iraq. p.399. (In Arabic).

- Salunkhe, D.K., B.B. Desai, and N.R. Bhatt (1987). Vegetable and flower seed production. Agricore Publishing Academy. New Delhi, India. 144– 150. pp.

- Zohary, D. and M. Hopf. 2000. Domestication of plants in the old world, (3rd Ed.) Oxford: University Press, pp. 139 .

- **Zohary, D.; Hopf, M. and Weiss, E.,** (2012). Domestication of plants in the Old World: the origin and spread of domesticated plants in Southwest Asia, Europe, and the Mediterranean Basin (4th ed.). Oxford: University Press, p. 139.

- **Some internet webs which are related with the subjects**

- **Practical Topics**	Dleen Monawar Saeed and
1st week: Mulching in vegetable production, Kinds of mulches, Advantages and disadvantages of mulching, Plastic mulch application, Planting consideration and removing plastic mulches.	(3hrs) 17/1/ 2023
2nd week: Morphology of some warm season vegetable crops: **-Solanaceae (nightshade family)** **1-Potato** The main points: - Botanical description - Varieties - Reproductive methods - Planting methods - Management of diseases and insect pests	(3hrs) 24/1/2023
3rd week: **2- Tomato** The main points: - - Botanical description - Varieties - Reproductive methods - Planting methods - Management of diseases and insect pests	(3hrs) 31/1/2023

4th week: **3- Eggplant:** The main points: - - Botanical description - Varieties - Reproductive methods - Planting methods - Management of diseases and insect pests	(3hrs) 7/2/2023
5th week: **4- Peppers:** The main points: - - Botanical description - Varieties - Reproductive methods - Planting methods - Management of diseases and insect pests	(3hrs) 14/2/2023
6th week: 1st– Examination	(3hrs) 21/2/2023
7th week: Fabaceae (Leguminosae)Family **1- Common bean** The main points: - - Botanical description - Varieties - Reproductive methods - Planting methods - Management of diseases and insect pests	(3hrs) 28/2/2023
8th week: **2-Cowpea** The main points: - - Botanical description - Varieties - Reproductive methods - Planting methods - Management of diseases and insect pests	(3hrs) 7/3/2023

9th week: cucurbitaceae family **1- <u>cucumber:</u>** The main points: - - Botanical description - Varieties - Reproductive methods - Planting methods - Management of diseases and insect pests	Shayma Fathulla Mohammed (3hrs) 28/3/2023
10th week: - **<u>2- Watermelon</u>** The main points: - - Botanical description - Varieties - Reproductive methods - Planting methods - Management of diseases and insect pests	(3hrs) 4/4/2023
11th week: 2nd exam	(3hrs) 11/4/2023
12th week: Malvaceae family **<u>okra:</u>** The main points: - - Botanical description - Varieties - Reproductive methods - Planting methods - Management of diseases and insect pests	(3hrs) 18/4/2023

19. Examinations:

Quality of the exam questions:

Q1/ Define the following

Q2 / Numerate the following

Q3 / What are the differences between the following

Q4 / what are the reasons of the following

Q5 / complete the following blanks

Q6/Explain or talk about the following

Q7/ List or Describe two ways of

Q8/Write the scientific, family name and the quantity of yield for the following vegetables.

Q9/ What are the advantages and disadvantages of -------

Q10/ Mention the followings