DEPARTMENT OF HORTICULTURE

FACULTY OF AGRICULTURAL SCIENCES

University of the Punjab, Lahore

Programme	B.Sc. (Hons.) Agriculture	Course Code	HORT-303	Credit Hours	3(2-1)
Course Title	**PRINCIPLES OF VEGETABLE PRODUCTION**				

Course Introduction

This course is designed to provide a comprehensive understanding of principles of vegetable production. The principles of vegetable production encompass a comprehensive approach to cultivating high-quality, nutritious crops efficiently and sustainably. Central to this is selecting appropriate vegetable varieties suited to local climatic and soil conditions, ensuring optimal growth and yield.

Learning Outcomes

Upon completion of the course, students will develop:
A comprehensive understanding of the principles and physiology involved in vegetable production.

	Course Content	Assignments/Readings
Week 1	**Unit-I** 1.1 Introduction to vegetable production 1.2 Importance of vegetables	
	1.3 Classification of vegetables	
Week 2	**Unit-II** 2.1 Environmental simulation	
	2.2 Climate and soils	
Week 3	**Unit-III** 3.1 Cropping systems	
	3.2 Succession 3.3 Relay and multiple cropping	
Week 4	**Unit-IV** 4.1 Propagation 4.2 Crop management practices	
Week 5	**Unit-V** 5.1 Harvesting	
	5.2 Post harvest handling	
Week 6	**Unit-VI** 6.1 Recent trends in vegetable production	

	6.2 Factors affecting vegetable production	
Week 7	**Unit-VII** 7.1 Hardening	
	7.2 Staking	
Week 8	**Unit-VIII** 8.1 Bulb and tuber formation	
	8.2 Crop management	
Week 9	**Unit-IX** 9.1 Quality assurance	
Week 10	**Unit-X** 10.1 Parthenocarpy	
	10.2 Seedlessness	
Week 11	**Unit-XI** 11.1 Physiological disorders	
Week 12	**Unit-XII** 12.1 Production problems	
	12.2 their management	
Week 13	**Unit-XIII** 13.1 Mulching of vegetable crops	
Week 14	**Unit-XIV** 14.1 Use of plant growth regulators	
Week 15	**Unit-XV** 15.1 Breeding	
Week 16	**Unit-XVI** 16.1 Improving vegetables.	
PRACTICAL		
Week 1	Identification of various vegetables	

Week 2	Nursery raising	
Week 3	Training and pruning	
Week 4	Planting and cultural operations	
Week 5	Harvesting	
Week 6	Packing methods	
Week 7	Pruning and staking practices	
Week 8	Marketing of important vegetables	
Week 9	Visit of vegetable production areas	
Week 10	Visits of vegetable markets	
Week 11	Determination of soil	
Week 12	Important cultivars of vegetables	
Week 13	Methods of sowing	
Week 14	Seed priming	
Week 15	Visits to vegetable farms	
Week 16	Hardening and transplanting of seedlings	

Textbooks and Reading Material

1. Dhaliwal, M.S. 2008. Handbook of Vegetable Crops. Kalyani Publishers, Ludhiana, New Delhi, India.
2. Fordham, R. and A.G. Biggs. 1985. Principles of Vegetable Crop Production. Collins, London.
3. Hazra, P. and M.G. Som. 2005. Vegetable Science. Kalyani Publishers, Ludhiana, New Delhi, India.
4. Bose, T.K., M.G. Som and J. Kabir. 1993. Vegetable Crops. Naya Prokash, Calcutta-Six.
5. Swaider, J.M., G.W. Ware and J.P. McCollum. 2002. Producing Vegetable Crops (5th Ed.), Interstate Publishers Printers and Publishers Inc., Danville, Illinois.

Teaching Learning Strategies

1. Lectures
2. Discussions
3. Presentations
4. Quiz
5. Assignments

Assignments: Types and Number with Calendar

Identify and evaluate vegetable varieties that are resilient to climate change. Discuss their characteristics, advantages, and potential challenges in cultivation.

Assessment

Sr. No.	Elements	Weightage	Details
1.	Midterm Assessment	35%	Written Assessment at the mid-point of the semester.

2.	Formative Assessment	25%	Continuous assessment includes: Classroom participation, assignments, presentations, viva voce, attitude and behavior, hands-on-activities, short tests, projects, practical, reflections, readings, quizzes etc.
3.	Final Assessment	40%	Written Examination at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.

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