

FACULTY OF AGRICULTURAL SCIENCES
UNIVERSITY OF THE PUNJAB, LAHORE

Programme	BS-Agribusiness	Course Code	AB-203	Credit Hours	3 (2-1)
Course Title	PRINCIPLES OF HORTICULTURAL CROP PRODUCTION				
Course Introduction					
This course is designed to introduce the student to the basic concepts and skills utilized in horticulture. Students will receive an introduction to basic Plant science concepts such as morphology, anatomy, taxonomy, physiology, genetics, and propagation as they apply to horticulture.					
Learning Outcomes					
On the completion of the course, the students will:					
<ol style="list-style-type: none"> 1. To provides the knowledge to solve many of the problems commonly faced in keeping plants healthy. 2. Acquaint the student with the broad field of horticulture including greenhouse and nursery crops. 3. To provide the basic knowledge of ornamental horticulture, pomology, and olericulture. 					
Course Content				Assignments/Readings	
Week 1	Unit-I				
	1.1 Introduction to Horticulture				
	1.2 History of Horticulture				
	1.3 relationship with other disciplines				
1.4 future scope of Horticulture					
Week 2	Unit-II				
	2.1 Definition and divisions of horticulture				
2.2 Classification of horticultural crops					
Week 3	Unit-III				
	3.1 Modification of plant parts				
	3.2 their functions				
	3.3 Plant environment				
	3.4 climate (temperature, light, humidity etc)				
3.5 soil (structure, texture, fertility etc)					
Week 4	Unit-IV				
	4.1 Establishment of orchards				
	4.2 and vegetable & ornamental gardens				
	4.3 Site selection				
4.4 Layout methods and wind breaks					
Week 5	Unit-V				
	5.1 Management practices				
5.2 Harvesting, post-harvest handling					

	5.3 Marketing of important horticultural crops	
Week 6	Unit-VI	
	6.1 Irrigation management:	
	6.2 Fertilizers & manures 6.3 training and pruning	
Week 7	Unit-VII	
	7.1 Climate	
	7.2 soil	
	7.3 propagation 7.4 rootstocks	
Week 8	Unit-VIII	
	8.1 cultivars 8.2 important pests	
Week 9	Unit-IX	
	9.1 Harvesting 9.2 Post-harvest handling	
Week 10	Unit-X	
	10.1 Marketing of important horticultural crops 10.2 Future Crisis in Pakistan	
Week 11	Unit-XI	
	11.1 Importance of fruits 11.2 Importance of Vegetables and ornamental	
Week 12	Unit-XII	
	12.1 Pest and diseases 12.2 solution	
Week 13	Unit-XIII	
	13.1 Food Marketing 13.2 Marketing strategies	
Week 14	Unit-XIV	
	14.1 Quality factors in fruit 14.2 Quality factors in vegetables and ornamental	
Week 15	Unit-XV	
	15.1 Modern technology	
Week 16	Unit-XVI	
	16.1 Business Management in Horticultural crops	
PRACTICAL		

Week 1	Visit of nurseries, commercial gardens and public parks.	
Week 2	Identification and nomenclature of important fruits, vegetables and ornamental plants.	
Week 3	Garden tools and their uses.	
Week 4	Media preparation.	
Week 5	Techniques of propagation.	
Week 6	Practice in layout methods.	
Week 7	Planting and after care.	
Week 8	Production techniques of important cultivars of horticultural crops of the region.	
Week 9	Selection of plants from nursery	
Week 10	propagation methods.	
Week 11	identification of important cultivars	
Week 12	Nursery management and Parks designing	
Week 13	Harvesting of ornamental plants	
Week 14	Post-harvest handling techniques	
Week 15	Business Management in Horticultural crop	
Week 16	Performance overview	

Textbooks and Reading Material

1. Acquaah, G. 2009. Horticulture: Principles and Practices (4th Ed.). Prentice-Hall India Learning Pvt. Ltd. New Delhi, India.
2. Arora, J.S. 1992. Introductory Ornamental Horticulture. Kalyani Publishers, New Delhi.
3. Dhaliwal, M.S. 2008. Handbook of Vegetable Crop. Kalyani Publishers, Ludhiana, New Delhi, India.
4. Malik, M.N. 1994. Horticulture, National Book Foundation, Islamabad.
5. Singh, B. 2007. Horticulture at a Glance. Kalyani Publishers, Ludhiana, New Delhi, India.

Teaching Learning Strategies

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

Assignments: Types and Number with Calendar

1. As per University Rules
2. Types and Number with calendar

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.