

**FACULTY OF AGRICULTURAL SCIENCES**  
UNIVERSITY OF THE PUNJAB, LAHORE

<b>Programme</b>	B.Sc. (Hons.) Agriculture	<b>Course Code</b>	<b>Hort-102</b>	<b>Credit Hours</b>	3 (2-1)
<b>Course Title</b>	<b>INTRODUCTORY HORTICULTURE</b>				
<b>Course Introduction</b>					
<p>This foundational course in horticulture provides students with a comprehensive overview of the fundamental principles and techniques essential to the field. Through this course, students will gain a solid understanding of key plant science concepts, including:</p> <ul style="list-style-type: none"> <li>- Morphology: the study of plant structure and form</li> <li>- Anatomy: the examination of plant internal structure</li> <li>- Taxonomy: the classification and identification of plant species</li> <li>- Physiology: the exploration of plant functions and processes</li> <li>- Genetics: the study of plant heredity and variation</li> <li>- Propagation: the methods and techniques for reproducing plants</li> </ul> <p>These concepts will be explored in the context of horticulture, providing students with a strong foundation for further study and practical application in the field.</p>					
<b>Learning Outcomes</b>					
<p>On the completion of the course, the students will:</p> <ol style="list-style-type: none"> <li>1. To provides the knowledge to solve many of the problems commonly faced in keeping plants healthy.</li> <li>2. Acquaint the student with the broad field of horticulture including greenhouse and nursery crops.</li> <li>3. To provide the basic knowledge of ornamental horticulture, pomology, and olericulture.</li> </ol>					
<b>Course Content</b>				<b>Assignments/Readings</b>	
<b>Week 1</b>	<b>Unit-I</b>				
	1.1 Introduction to Horticulture				

	1.2 History of Horticulture	
	1.3 relationship with other disciplines 1.4 future scope of Horticulture	
<b>Week 2</b>	<b>Unit-II</b> 2.1 Definition and divisions of horticulture	
	2.2 Classification of horticultural crops	
<b>Week 3</b>	<b>Unit-III</b> 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)	
	<b>Unit-IV</b> 4.1 Establishment of orchards 4.2 and vegetable & ornamental gardens	
	4.3 Site selection 4.4 Layout methods and wind breaks	
<b>Week 5</b>	<b>Unit-V</b> 5.1 Management practices 5.2 Harvesting, post-harvest handling	
	5.3 Marketing of important horticultural crops	
<b>Week 6</b>	<b>Unit-VI</b> 6.1 Irrigation management:	
	6.2 Fertilizers & manures 6.3 training and pruning	
	<b>Unit-VII</b>	
<b>Week 7</b>		

	7.1 Climate 7.2 soil	
	7.3 propagation 7.4 rootstocks	
<b>Week 8</b>	<b>Unit-VIII</b>	
	8.1 cultivars 8.2 important pests	
<b>Week 9</b>	<b>Unit-IX</b>	
	9.1 Harvesting 9.2 Post-harvest handling	
<b>Week 10</b>	<b>Unit-X</b>	
	10.1 Marketing of important horticultural crops 10.2 Future Crisis in Pakistan	
<b>Week 11</b>	<b>Unit-XI</b>	
	11.1 Importance of fruits 11.2 Importance of Vegetables and ornamental	
<b>Week 12</b>	<b>Unit-XII</b>	
	12.1 Pest and diseases 12.2 solution	
<b>Week 13</b>	<b>Unit-XIII</b>	
	13.1 Food Marketing 13.2 Marketing strategies	
<b>Week 14</b>	<b>Unit-XIV</b>	
	14.1 Quality factors in fruit 14.2 Quality factors in vegetables and ornamental	

<b>Week 15</b>	<b>Unit-XV</b>	
	15.1 Modern technology	
<b>Week 16</b>	<b>Unit-XVI</b>	
	16.1 course review	
<b>PRACTICAL</b>		
<b>Week 1</b>	Visit of nurseries, commercial gardens and public parks.	
<b>Week 2</b>	Identification and nomenclature of important fruits, vegetables and ornamental plants.	
<b>Week 3</b>	Garden tools and their uses.	
<b>Week 4</b>	Media preparation.	
<b>Week 5</b>	Techniques of propagation.	
<b>Week 6</b>	Practice in layout methods.	
<b>Week 7</b>	Planting and after care.	
<b>Week 8</b>	Production techniques of important cultivars of horticultural crops of the region.	
<b>Week 9</b>	Selection of plants from nursery	
<b>Week 10</b>	propagation methods.	
<b>Week 11</b>	identification of important cultivars	
<b>Week 12</b>	Nursery management and Parks designing	
<b>Week 13</b>	Harvesting of ornamental plants	
<b>Week 14</b>	Post-harvest handling techniques	
<b>Week 15</b>	Landscape ecology	
<b>Week 16</b>	Performance overview	

### Textbooks and Reading Material

1. Acquah, 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.