



DEPARTMENT OF HORTICULTURE
FACULTY OF AGRICULTURAL SCIENCES

University of the Punjab, Lahore

Programme	B.Sc. (Hons.) Agriculture	Course Code	HORT-302	Credit Hours	3(2- 1)
Course Title	COMMERCIAL FLOWER PRODUCTION				
Course Introduction					
<p>This course is designed to provide a comprehensive understanding of Commercial flower production. Commercial flower production is a vibrant and economically significant industry that contributes extensively to global trade, providing substantial revenue and employment opportunities. This sector is pivotal for many countries, generating foreign exchange through exports while diversifying agricultural economies and enhancing rural livelihoods. Flowers play an essential role in cultural, social, and aesthetic realms, making them integral to various ceremonies and everyday life.</p>					
Learning Outcomes					
<p>On the completion of the course, the students will:</p> <ol style="list-style-type: none"> 1. To accustom students with production technology of major flowers of Pakistan. 2. Identify and describe the major types of commercial flowers, their growth habits, and production requirements. 3. Apply knowledge of plant physiology and nutrition to optimize flower growth and quality. 4. Develop skills in flower crop planning, scheduling, and management to meet market demands. 5. Understand and implement integrated pest management (IPM) strategies for common flower pests and diseases. 6. Learn post-harvest handling and care techniques to maintain flower quality and longevity. 7. Develop marketing and sales strategies for commercial flower products. 					
Course Content			Assignments/Readings		
Week 1	Unit-I				
	1.1 Introduction to Commercial flower production				
	1.2 Importance of flowers				
	1.3 Classification of flowers				
Week 2	Unit-II				
	2.1 Environmental simulation				
	2.2 Climate and soils				
Week 3	Unit-III				
	3.1 initiation				
	3.2 history,				

	3.3 developmental stages of flower 3.4 controlling factors	
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 chrysanthemum	
	6.2 Types of chrysanthemum	
Week 7	Unit-VII 7.1 Roses	
	7.2 Types of Roses	
Week 8	Unit-VIII 8.1 Marigold	
	8.2 jasmine (motia)	
Week 9	Unit-IX 9.1 Gypsophylla	
	9.2 Calendula	
Week 10	Unit-X 10.1 Orchids	
	10.2 Gerbera	
Week 11	Unit-XI 11.1 Nemesia	
	11.2 Statice	

Week 12	Unit-XII	
	12.1 stock	
	12.2 Geranium	
Week 13	Unit-XIII	
	13.1 Sweet pea	
	13.2 Zinnia	
Week 14	Unit-XIV	
	14.1 Dahlia	
	14.2 Amaryllis	
Week 15	Unit-XV	
	15.1 Anemone	
Week 16	Unit-XVI	
	16.1 Freesia	
	16.2 Gladiolus	
	16.3 marketing of important floral crops	
PRACTICAL		
Week 1	Identification of various flowers	
Week 2	Nursery raising	
Week 3	Training and pruning	
Week 4	planting and cultural operations	
Week 5	Harvesting	
Week 6	packing methods	
Week 7	Practices to control irregular bearing	
Week 8	Marketing of important Commercial Flowers	
Week 9	Visit of commercial production areas	
Week 10	Visits of floral markets	
Week 11	Determination of soil pH	

Week 12	Visits to flower nursery	
Week 13	Planting methods	
Week 14	Pollination techniques	
Week 15	Handling	
Week 16	Sustainable Production methods	

Textbooks and Reading Material

1. Armitage, A.M. and J.M. Laushman. 2003. Specialty Cut Flowers (2nd Ed.). Timber Press, Windsor, Australia.
2. Bose, T.K., L.P. Yadav, P. Pal, V.A. Parthasarathy and P. Das. 2003. Commercial Flowers (2nd Ed.). Naya Udyog, Calcutta, India.
3. Banerjee, U. 2001. Commercial Flower Production. Mangal Deep Publications, Jaipur, India.
4. Larson, RA. 1980. Introduction to Floriculture. Academic Press, New York, USA.
5. Prasad, S. and U. Kumar. 2005. Commercial Floriculture. Agrobios (India), Jodhpur, 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. Number with calendars

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.