

Course Code : HRT 102

Course Title : Ornamental Horticulture

Credit Hours : 3(2+1) Full Marks: 75 Theory: 50 Practical: 25

OBJECTIVES

Upon the completion of this course, the students will be able to understand Ornamental Horticulture situation and basic knowledge and skills on landscape gardening, cultivation practices and propagation of ornamental plants.

I. SYLLABUS

Importance and history of Ornamental Horticulture, status, prospect and constraints of ornamental horticulture industry in Nepal, classification of ornamental plants, definition, history, scope, features and components of landscape gardening, factors affecting, elements, styles, steps and principles of landscape gardening design, use of plants in landscape design, lawn and its management, flower arrangement and its types, bonsai and its management, exhibition and judging of ornamental plants, flowers and potted plants, establishment of nursery enterprise, media, containers, equipment propagation and structure, cut flower and their cultivation, post harvest practices of cut and loose flowers, vase life study and vase solution, indoor gardening, pot culture display and hanging baskets, commercial cultivation of important cut flowers and loose flowers, protected cultivation of cut and loose flowers.

II. COURSE OUTLINE

A. Lecture

S.N.	Topic	No. of Lectures
1.	Importance and history of Ornamental Horticulture.	2
	1.1 Floriculture industry in Nepal, its status, prospects and constraints	
2.	Classification of Ornamental Plants	4
	2.1 Based on their aesthetic and functional value	
	2.1.1 Flowering plants	
	2.1.2 Ornamental foliage trees, Shrub and shrubberies	
	2.1.3 Climbers, Cactus and succulents, Bulbous plants	
	2.1.4 Based on their life cycle (Annual, biennial and perennial)	
3.	Landscape gardening	3
	3.1 Definition, history, scope, features and components of landscape gardening.	
	3.2 Factors affecting, elements, styles, steps of landscape gardening	
	3.3 Principle of landscape gardening design. Use of plants in landscape design	

4.	Lawn management	
4.1	Lawn and its preparation. Selection of grasses in different ecological zones, planting and sowing of seeds	2
4.2	Management of lawn grasses	
5.	Flower arrangements	2
5.1	Importance, styles (design), materials used in flower arrangements.	
5.2	Eastern and western type of flower arrangements.	
6.	Bonsai	2
6.1	Introduction and history of bonsai making, selection of plants	
6.2	Style and management of bonsai.	
7.	Exhibition and judging of ornamental plants, flowers (cut and loose) and potted plants.	1
8.	Establishment of nursery enterprises.	2
8.1	Nursery media, pot type or containers	
8.2	Equipments, propagation and structures.	
9.		4
9.1	Pre and postharvest practices of cut flowers and loose flowers.	
9.2	Vase life study and vase solutions.	
9.3	Indoor gardening, care and management	
9.4	Pot culture, display and hanging baskets.	
10.	Commercial cultivation of important cut flowers and loose flowers (Gladiolus, Rose, tuberose, Orchids, Carnation, Gerbera, marigold, Chrysanthemum, Bird of paradise, Anthurium)	6
10.1	Gladiolus	
10.2	Rose and tuberose	
10.3	Orchids and carnation	
10.4	Marigold and gomphrina	
10.5	Chrysanthemum and gerbera	
10.6	Bird of paradise and anthurium	
11.	Protected cultivation	2
11.1	Protected cultivation of cut flowers.	
11.2	Protected cultivation of loose flowers	
Total		30

B. Practical

S.N.	Topics	No. of Praticals
1.	Preparation of flower bed/seed bed/nursery bed	1
2.	Media preparation, potting and repotting of ornamental plants	1
3.	Preparation of lawn	1
4.	Preparation of bonsai	1
5.	Practices in different types of flower arrangement	1
6.	Cultivation practices of seasonal cut flowers	1
7.	Maintenance of indoor plants	1
8.	Practices in landscape gardening design	1
9.	Training practices of ornamental plants	1
10.	Pruning practice of ornamental plants	1
11.	Propagation practices in different types of ornamental plants	2
	11.1 Cutting and layering	
	11.2 Grafting and budding	
12.	Herbarium collection and identification of ornamental plants	1
13.	Project developed on floribusiness enterprises	1
14.	Nursery and flori farm visit at local level	1
	Total	15

REFERENCES

Arora, J.S. 1990. Introductory Ornamental Horticulture.

Kalyani Publisher, New Delhi. Randhawa, G.S. and A. Mukhopadhyhy 1986. Floriculture in India. Allied Publisher, India.

Lauria, A. and H.R. Victor 2001. Floriculture: Fundamentals and Practices. Agrobios, India.

Bose, T.K. and L.P. Yadav 1989. Commercial Floriculture, Naya Prakash, Calcutta.