



UNIVERSITI TEKNOLOGI MARA

AGR112: BASIC LANDSCAPE PLANTS

<b>Course Name (English)</b>	BASIC LANDSCAPE PLANTS <b>APPROVED</b>
<b>Course Code</b>	AGR112
<b>MQF Credit</b>	3
<b>Course Description</b>	Students are introduced to ornamental horticulture and landscape design. Attention is paid to the common landscape plants in Malaysia, the establishment and management of a commercial nursery, plant propagation and the principles of landscape design. Current topics of interest in the landscape industry are also discussed, including golf, turfgrass, bonsai and others.
<b>Transferable Skills</b>	Student able to acquire knowledge and understanding of agricultural science, business and planting industry management
<b>Teaching Methodologies</b>	Lectures, Field Trip, Discussion
<b>CLO</b>	CLO1 1.State, write and explain the principles and practices in the production of ornamental trees, shrubs and turf in a commercial nursery setting (LO1). 2. Comprehend and describe the basic principles of landscape design (LO2). 3. Describe and apply the principles of planting and management of ornamental trees, shrubs and turf grass (LO1). 4. Describe and differentiate between the fundamental features of specialized landscapes, including golf courses, bonsai, topiary, terrarium, and rock gardens (LO2). 5. Identify common landscape plants, list their scientific and common names, and describe their general characteristics(LO1)
<b>Pre-Requisite Courses</b>	No course recommendations
<b>Topics</b>	
<b>1. 1. Introduction</b> 1.1) 1.1 Definition of horticulture 1.2) 1.2 Fields of horticulture : pomology , olericulture , 1.3) floriculture, ornamental horticulture and landscaping 1.4) 1.3 Importance of ornamental horticulture and 1.5) landscape: economic, esthetic , 1.6) environmental and others 1.7) 1.4 Malaysian landscape heritage: Islamic 1.8) landscape traditions and local expressions	
<b>2. 2.Ornamental Plants</b> 2.1) 2.1 Plant taxonomy 2.2) 2.2 Horticultural classification of plants 2.3) 2.3 Introduction to common landscape plants 2.4) 2.3.1 Outdoor plants 2.5) 2.3.2 Indoor plants 2.6) 2.4 Basic needs of plants in the landscape: soil nutrients, 2.7) water, light, air and temperature 2.8) 2.5 Types and usage of plant growth hormones	
<b>3. 3.Propagation Techniques</b> 3.1) 3.1 Sexual propagation: Seed resources, treatment and 3.2) storage of seeds, viability tests, planting methods 3.3) 3.2 Asexual propagation 3.4) 3.2.1 Cuttings: stem, leaf, root 3.5) 3.2.2 Layering: Marcotting, ground, tip, mound 3.6) 3.2.3 Grafting: Bud, wedge, tongue, bridge 3.7) 3.2.4 Specialized plant organs 3.8) 3.3 Micropropagation: tissue culture	

<p><b>4. 4.Establishment and management of nursery</b>  4.1) 4.1 Site planning and selection  4.2) 4.2 Important structures and nursery design  4.3) 4.3 Management of nursery</p>
<p><b>5. 5.Planting and maintenance of plants in containers</b>  5.1) 5.1 Types of plant containers  5.2) 5.2 Planting media - native and commercial soil  5.3) 5.3 Maintenance – watering, fertilizing, pruning, labelling  5.4) and recording, pest and disease control, and repotting</p>
<p><b>6. 6.Basic landscape plants</b>  6.1) 6.1 Definition of landscape, landscaping,  6.2) landscape design, landscape architect,  6.3) landscape designer  6.4) 6.2 Function of plants in landscape design  6.5) 6.3 Plant characteristics for landscape design  6.6) 6.4 Landscape design principles  6.7) 6.5 Landscape design process  6.8) 6.6 Planting and maintenance of landscape areas</p>
<p><b>7. 7.Planting and management of turf grass</b>  7.1) 7.1 Importance and uses of turf grass  7.2) 7.2 Types of turf grass and their selection  7.3) 7.3 Planting techniques  7.4) 7.4 Maintenance of turf grass</p>
<p><b>8. 8.Golf course management</b>  8.1) 8.1 Golf industry in Malaysia  8.2) 8.2 History and rules of golf  8.3) 8.3 Layout of typical golf course  8.4) 8.4 Management of golf course</p>
<p><b>9. 9.Planting and production of orchids</b>  9.1) 9.1 Types of orchids in Malaysia  9.2) 9.2 Sexual and asexual propagation  9.3) 9.3 Transplanting and potting  9.4) 9.4 Methods of planting orchids  9.5) 9.5 Orchid maintenance</p>
<p><b>10. 10.Specialized Landscape Topics</b>  10.1) 10.1 Bonsai  10.2) 10.2 Topiary  10.3) 10.3 Terrarium  10.4) 10.4 Rock gardens</p>

Assessment Breakdown	%
Continuous Assessment	60.00%
Final Assessment	40.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	n/a	10%	
	Group Project	n/a	20%	
	Test	n/a	20%	
	Written Report	n/a	10%	

Reading List	Recommended Text	<ul style="list-style-type: none"> <li>Poincelot, R.P 2004, <i>Sustainable Horticulture: Today and Tomorrow</i>, Prentice Hall</li> </ul>
	Reference Book Resources	<ul style="list-style-type: none"> <li>Brandies, M.M. 2004, <i>Landscaping with Tropical Plants.</i>, Sunset Series. Leisure Arts.</li> <li>Emmons, R.D 2000, <i>Turfgrass Science and Management</i>, CENGAGE Delmar Learning.</li> </ul>
Article/Paper List	This Course does not have any article/paper resources	
Other References	This Course does not have any other resources	