



UNIVERSITI TEKNOLOGI MARA

WTE160: FOREST DENDROLOGY

Course Name (English)	FOREST DENDROLOGY APPROVED
Course Code	WTE160
MQF Credit	3
Course Description	This course exposes students on identification of Malaysian trees using forest (arboretum) and herbarium characteristics.
Transferable Skills	Lecture-discussion Active engagement via lecture-discussion Scientific investigation and field work
Teaching Methodologies	Lectures, Field Trip, Case Study, Practical Classes
CLO	CLO1 Describe the features related to commercial tree species using forest and herbarium characteristics in Peninsular Malaysia. CLO2 Prepare the features of commercial tree species using forest and herbarium characteristics in Peninsular Malaysia. CLO3 Identify commercial tree species using forest and herbarium characteristics in Peninsular Malaysia.
Pre-Requisite Courses	No course recommendations
Topics	
1. Introduction to Dendrology 1.1) Terminology and Definitions	
2. Tree Identification Based On Forest Characters (Arboretum) 2.1) Forest Characters: 2.2) Habitat 2.3) Bole 2.4) Buttresses 2.5) Innerbark 2.6) Smell 2.7) Latex 2.8) Texture 2.9) Crowning and branching	
3. Tree Identification Based On Leaf Characters (Herbarium) 3.1) Herbarium Characters 3.2) Leaf structures (simple or compound) 3.3) Leaf arrangement (alternate, opposite, spiral, whorls) 3.4) Leaf feature (shape, apex, margin, base) 3.5) Leaf Texture 3.6) Leaf Venation 3.7) Twig 3.8) Stipule 3.9) Inflorescence 3.10) Fruits	
4. Descriptions Of Dipterocarps groups 4.1) Dipterocarps Group (Dipterocarpaceae Family) 4.2) Main Genera: 4.3) Shorea, Hopea, Anisoptera, Parashorea, Vatica, Dipterocarpus, Neobalanocarpus, Dryobalanops and Cotylelobium.	

5. Descriptions Of Non-Dipterocarps Groups

5.1) Non-Dipterocarps Group

5.2) Anacardiaceae, Annonaceae, Apocynaceae, Burseraceae, Dilleniaceae, Euphorbiaceae, Fagaceae, Guttiferae, Lauraceae, Leguminosae, Moraceae, Myristicaceae, Sapotaceae, Sterculiaceae

Assessment Breakdown	%
Continuous Assessment	60.00%
Final Assessment	40.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Practical	Herbarium	30%	CLO2
	Test	Test 1	15%	CLO1
	Test	Test 2	15%	CLO1

Reading List	Reference Book Resources
	<ul style="list-style-type: none"> • C.F. Symington, P.S. Ashton, S. Appanah, <i>Forester's Manual of Dipterocarps</i>, Malaysian Nature Society [ISBN: 9832883008] • Written principally at the Forest Research Institute, Kepong. Edited by T. C. Whitmore, <i>Tree flora of Malaya</i>, [London] Longman [1972-<1978>] [ISBN: 0582724120] • by J. Wyatt-Smith, third revision by K. M. Kochummen., <i>Pocket check list of timber trees</i>, ; Forest Research Institute Malaysia [ISBN: 9839592947] • Jegatheswaran, R., Lai Food See, Faridah Hanum, I. 2014, <i>Introductory Forest Science</i>, Universiti Putra Malaysia Press. [ISBN: 9789673443] • Ng. F.S.P. (Ed.) 1989, <i>Tree Flora of Malaya</i>, Volume 4 Ed., Longman Malaysia Kuala Lumpur [ISBN: 967976202 5]

Article/Paper List	This Course does not have any article/paper resources
Other References	This Course does not have any other resources