UNIVERSITI TEKNOLOGI MARA

BDY633: SILVICULTURE

Course Name (English)	SILVICULTURE APPROVED
Course Code	BDY633
MQF Credit	3
Course Description	This course introduces silviculture terminology, concepts and their application. Malaysian lowland forest will be highlighted. Silvicultural prescriptions are covered in establishing forest stands, manipulating species composition, enhancing stand growth and health to meet a variety of environmental, societal and economic objectives.
Transferable Skills	On Completion of the course the student should be able to: 1. apply the principles of silviculture terminology, concept and application. 2. Manage and develop prescriptions to mange the soils and vegetation of forest. 3. apply the concept of biodiversity and recycling in Agroforestry systems.
Teaching Methodologies	Lectures, Blended Learning, Field Trip, Practical Classes, Presentation, Supervision
CLO	CLO1 1. Describe the silvicultural characteristics of at least 30 tree species common to Malaysia CLO2 2. Assess resources and develop prescriptions to manage the soils and vegetation of a forest CLO3 3. Apply the knowledge of biodiversity and recycling concept in developing agroforestry systems
Pre-Requisite Courses	No course recommendations

Topics
1. Definition and principles 1.1) N/A
2. Silviculture system 2.1) N/A
3. Natural regeneration 3.1) N/A
4. Stand structure and dynamics 4.1) N/A
5. Artificial regeneration 5.1) N/A
6. Nursery management 6.1) N/A
7. Site preparation 7.1) N/A
8. Site species relationship 8.1) N/A
9. Light Interception and Stand Nutrition 9.1) N/A
10. Soil and Water Conservation 10.1) N/A
11. Pests and Diseases 11.1) N/A

12. Thinning and Yield Estimation 12.1) N/A
13. Mixed Stands 13.1) N/A
14. Agroforestry 14.1) N/A

Assessment Breakdown	%
Continuous Assessment	50.00%
Final Assessment	50.00%

Details of Continuous Assessment

Assessment Type	Assessment Description	% of Total Mark	CLO
Practical	n/a	10%	CLO3
Presentation	n/a	10%	CLO2
Test	n/a	30%	CLO1

Reading List

Reference Book Resources

- **Chuan, T.T. and Tangau, W.M 1991, *Cultivated and potential forest plantation tree species with special reference to Sabah.*, Institute for Development Studies (Sabah)**
- **Evans, J and Turnbull, J 2004, *Plantation Forestry in the Tropics*, 3rd Ed., Oxford University Press, UK**
- **Kelty, M.J., Larson, B. C. and Oliver, C.D. 1992, *The ecology and Silviculture of mixed-species forests.*, Kluwer Academic Publishers**
- **Schmidt, L 2007, *Tropical Forest seed*, Springer Publishing**
- **Uphoff, N., Ball, A.S., Palm, C., Fernandes, E., Pretty, J., Herren, H., Sanchez, P., Husson, O., Sanginga, N., Laing, M. and Thies, J 2006, *Biological Approaches to sustainable soil systems*, CRC Press**

Article/Paper List: This Course does not have any article/paper resources

Other References: This Course does not have any other resources