



UNIVERSITI TEKNOLOGI MARA

BDY422: PENGURUSAN SUMBER BIODIVERSITI

Course Name (English)	PENGURUSAN SUMBER BIODIVERSITI APPROVED
Course Code	BDY422
MQF Credit	2
Course Description	This course provides students with a full understanding of the significance of biodiversity in planning and managing sustainable systems and processes. Students will learn how to: describe the major components of biodiversity; conduct inventories of local biotas using standard techniques; understand the complex processes threatening biodiversity; develop first-level strategies for managing processes which threaten biodiversity; apply a range of biodiversity assessment techniques; ensure that biodiversity conservation is an integral part of any program of sustainable natural resource management.
Transferable Skills	From this course, student will be able to; <ol style="list-style-type: none">1. Understand the major components of biodiversity.2. Understand the processes threatening biodiversity and think of solution to control the threat.3. Apply the biodiversity assessment techniques for research or case study analysis.4. Apply knowledge of biodiversity in research involving biodiversity resource management.
Teaching Methodologies	Lectures, Field Trip, Tutorial, Presentation
CLO	<p>CLO1 Describe the major components of biodiversity at different spatial scale and the standard techniques used to conduct inventories of local biota as including sampling techniques and methodologies.</p> <p>CLO2 Recognize the complex processes threatening biodiversity in any particular ecosystem or region</p> <p>CLO3 Apply a range of biodiversity assessment techniques including the use of computers to organise, analyse and graphically present information gathered for research or case study analysis</p> <p>CLO4 Apply the knowledge of biodiversity to ensure that biodiversity conservation is an integral part of any program of sustainable natural resource management.</p>
Pre-Requisite Courses	No course recommendations
Topics	
1. Introduction to biodiversity resources 1.1) N/A	
2. Genes, species and ecosystems 2.1) N/A	
3. Contribution of biodiversity 3.1) N/A	
4. Processes threatening biodiversity 4.1) N/A	
5. Measuring and assessing biodiversity 5.1) N/A	
6. Species redundancy 6.1) N/A	

7. Biodiversity accounting 7.1) N/A
8. Legislative frameworks 8.1) N/A
9. Integrating biodiversity conservation and natural resources management 9.1) N/A
10. Utilizing biodiversity 10.1) N/A
11. Genetic resources 11.1) N/A
12. Potential environmental costs 12.1) N/A
13. Benefits of transgenic and translocated organisms 13.1) N/A
14. Maintaining natural systems: biodiversity and ecologically sustainable development 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
	Assignment	Assignment (Case Study)	20%	CLO4
	Presentation	Presentation	20%	CLO3
	Test	Test	10%	CLO2

Reading List	Recommended Text
	<ul style="list-style-type: none"> Jeffery, M., I., Firestone, J., M. and Bubna-Litic, K. 2008, <i>Biodiversity Conservation, Law and Livelihoods: Bridging the North-South Divide.</i>, Cambridge University Press.

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

Other References	
	<ul style="list-style-type: none"> n/a Chapin III., F., S., Sala, O., E., and Huber-Sannwald, E. 2001, <i>Global Biodiversity in a Changing Environment: Scen and rios for the 21st Century</i> , Springer n/a Cooney, R. and Dickson, B. 2005, <i>Biodiversity and the Precautionary Principle: Risk and Uncertainty in Conservation and Sustainable Use.</i> , Earthscan. n/a Jeffries, M., J. 2006, <i>Biodiversity and Conservation</i>, Routledge n/a Levin, S., A. 2001, <i>Encyclopedia of Biodiversity</i>, Academic Press n/a Perrings, C. 1995, <i>Biodiversity Conservation: Problems and Policies.</i> , Springer. n/a Swiderska, K., Roe, D., Siegele, L., and Grieg-gran, M. 2009, <i>The Governance of the Nature and the Nature of Governance: Policy That Works for Biodiversity Livelihoods</i>