



## UNIVERSITI TEKNOLOGI MARA

### BIO567: ENVIRONMENTAL SCIENCE

<b>Course Name (English)</b>	ENVIRONMENTAL SCIENCE <b>APPROVED</b>
<b>Course Code</b>	BIO567
<b>MQF Credit</b>	3
<b>Course Description</b>	This course introduces students to basic ecological principles, population, anthropogenic activities and their impact natural resources, environmental issues, environmental ethics keeping in mind the role of individuals, society to attain an environmentally just and sustainable world.
<b>Transferable Skills</b>	Understanding of the natural environment and its anthropogenic impacts which is useful for society
<b>Teaching Methodologies</b>	Lectures, Blended Learning, Self-directed Learning
<b>CLO</b>	CLO1 Explain basic ecological and ecosystem principles and environmental sustainability CLO2 Describe human population growth CLO3 Explain anthropogenic impacts on natural resources and ecosystems in relation to carrying capacity CLO4 Discuss current global, regional and national environmental issues in relation to society and sustainable ethics
<b>Pre-Requisite Courses</b>	No course recommendations
<b>Topics</b>	
<b>1. 1.0 Introduction to Environmental Protection</b> 1.1) 1.1 Environmental Science and Critical Thinking 1.2) 1.2 Environmental Sustainability 1.3) 1.3 Environmental Crisis	
<b>2. 2.0 Natural and Human Systems</b> 2.1) 2.1 How Ecosystems Work 2.2) 2.2 Biomes and Aquatic Life Zones 2.3) 2.3 Self Sustaining Mechanisms in Ecosystems 2.4) 2.4 Human Ecology	
<b>3. 3.0 The Population Challenge</b> 3.1) 3.1 Population: Growth and Its Impact 3.2) 3.2 Stabilising Human Populations	
<b>4. 4.0 Resource Issues</b> 4.1) 4.1 Sustainable System of Agriculture 4.2) 4.2 Preserving Biological Diversity 4.3) 4.3 Grassland, Forests and Wilderness 4.4) 4.4 Water Resources 4.5) 4.5 Non Renewable and Renewable Energy 4.6) 4.6 Mineral Resources 4.7) 4.7 Sustainable Communities	
<b>5. 5.0 Earths Carrying Capacity</b> 5.1) 5.1 Principles of Toxicology 5.2) 5.2 Air and Noise Pollution 5.3) 5.3 Global Air Pollution 5.4) 5.4 Water Pollution 5.5) 5.5 Pests and Pesticides 5.6) 5.6 Hazardous and Solid Wastes	

**6. 6.0 Ethics, Economics and Environment**

6.1) 6.1 Environmental Ethics

6.2) 6.2 Sustainable Economics: Industrial and Developing Nations

6.3) 6.3 Government and Society

Assessment Breakdown	%
Continuous Assessment	50.00%
Final Assessment	50.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	Assignment 1	15%	CLO1
	Assignment	Assignment 2	15%	CLO2
	Test	Test 1	20%	CLO3

Reading List	Recommended Text
	<ul style="list-style-type: none"> <li>• Cunningham P.A. &amp; M.A. Cunningham 2008, <i>Environmental Science</i>, 4th Ed., McGraw Hill International</li> <li>• Richard T. Wright, Dorothy F. Boorse, <i>Environmental Science</i>, Pearson [ISBN: 1-292-02084-9]</li> <li>• Miller, G.T &amp; S.E Spoolman 2012, <i>Living in the Environment</i>, 18th Ed., Cengage</li> </ul>

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

Other References	
	This Course does not have any other resources