

Marks	Grade Point	Letter Grade	Marks	Grade Point	Letter Grade
80>	4.00	A+	55-59	2.75	B-
75-79	3.75	A	50-54	2.50	C+
70-74	3.50	A-	45-49	2.25	C
65-69	3.25	B+	40-44	2.00	D
60-64	3.00	B	0-39	0.00	F



*Daffodil Polytechnic Institute,  
Institute Code: 50238*

### Lesson Plan – Academic session: April - August 2022

Subject Teacher : Rafsan Bin Ata (Instructor)  
 Subject Name : Environmental Studies  
 Subject Code : 69054  
 Technology : CMT A & B  
 Semester : 6<sup>th</sup>  
 Reference Book : Environmental Studies  
 (Publisher: RS, Haque.)

Mark Distribution (for 100 Marks)			
Theory Marks		Practical Marks	
Midterm	20	-	-
Class test	10	-	-
Quiz test	10	-	-
Final	60	-	-
<b>Total</b>	<b>100</b>	<b>Total</b>	

### Subject Aims:

Class Timing Distribution	
Particulars	Time
Greeting with students	05 Minutes
Previous Class Review	05 Minutes
Present Class Topic Discussion and Lecture Delivery	30 Minutes
Present Class Topics Review	05 Minutes

### **At the end of the course the student will be able:**

- ✓ To understand the basic concepts of environment and environmental pollution.
- ✓ To understand the concepts of ecology and ecosystems
- ✓ To understand the basic concepts of environmental degradation relating to industrial production.
- ✓ To understand the major environmental issues and problems.
- ✓ To understand legislative measures to protect environment.

### Subject Outcome:

Basic concepts of environment; natural resources; biogeochemical cycling; ecology and ecosystem; air; water; soil; solid waste management; development and environment; global environmental challenges; legislative protection of environment.

Lecture	Chapter/ Exam / Industrial Visit	Learning Area	Learning Outcome	Class/Lab Supporting Equipment's
01	Chapter-01 Understand the multidisciplinary	1.1. Define environment, nature, pollution, pollutant, contaminant.	➤ To know about environment.	<a href="https://youtu.be/NG5OgvGlc90">https://youtu.be/NG5OgvGlc90</a>

		nature of environmental studies.	1.2 Describe the earth's natural system. 1.3 Describe the scope of environmental studies.		
	02	Chapter-01	1.4 Describe the changing attitudes to the natural world 1.5 Distinguish between natural and man-made environment.	➤ To know about natural and man-made environment.	YouTube video link - <a href="https://youtu.be/S1cxPJ4g1ak">https://youtu.be/S1cxPJ4g1ak</a>
	03	Chapter-02 Understand the natural resources.	2.1 Classify natural resources. 2.2 Describe energy resources. 2.3 Describe environmental problem relating to resources use.	➤ To know about ecological terms.	YouTube video link - <a href="https://youtu.be/ajk-pvm5vfQ">https://youtu.be/ajk-pvm5vfQ</a>
	04	<b>Quiz Test(01)</b>	<b>Chapter: 1-2</b>	➤ Good concept the chapter.	<b>Result Must be Published within the next two lecture.</b>
	<b>Assignment-01</b>	<b>Assignment on lecture 01 - 03</b>	<b>To build up their confidence level &amp; increase creativity on chapter- 01 &amp; 02</b>		<b>Must be submitted within the next two lecture.</b>
	05	Chapter-03 Understand the biogeochemical cycling.	3.1 Describe hydrologic cycle. 3.2 Describe carbon cycle. 3.2 Describe nutrient cycle.	➤ To know about the ecological cycle.	YouTube video link - <a href="https://youtu.be/Bn41IXKyVWQ">https://youtu.be/Bn41IXKyVWQ</a>

	06	Chapter-04 Understand the ecology and ecosystem.	4.1 Define ecology and ecosystem. 4.2 Structure and function of an ecosystem. 4.3 Describe interdependency between abiotic and biotic component.	➤ To know about the function of an ecosystem.	YouTube video link - <a href="https://youtu.be/Bn41IXKyVWQ">https://youtu.be/Bn41IXKyVWQ</a>
	07	<b>Class Test(01)</b>	<b>Chapter: 3-4</b>	Good concept the chapter.	<b>Result Must be Published within the next two lecture.</b>
	08	Chapter-04	4.4 Describe the meaning of following terms: species, population, community, ecological succession, climax community, plankton, nekton, ecological indicator, evolution, , producers, decomposers, food chains, ecological pyramids, bio-concentration, bio-magnification, biodiversity	➤ To know about the ecological term.	YouTube video link - <a href="https://youtu.be/Bn41IXKyVWQ">https://youtu.be/Bn41IXKyVWQ</a>
	09	Chapter-04	4.5 Describe energy flow in the ecosystem. 4.6 Describe the ecosystem of pond, ocean, estuary, grassland, cropland, forest, desert and mangrove.	➤ To know about the energy flow of the ecosystem.	YouTube video link - <a href="https://youtu.be/T21OO0sBBfc">https://youtu.be/T21OO0sBBfc</a>
	10	Chapter-05 Understand the air as a component of environment.	5.1 Describe the atmospheric structure. 5.2 Explain the formation of photochemical smog and its effects.	➤ To know about the atmosphere.	YouTube video link - <a href="https://youtu.be/T21OO0sBBfc">https://youtu.be/T21OO0sBBfc</a>

11	Quiz Test(02)	Chapter: 5-6	➤ Good concept the chapter.	
Assignment-02		Assignment on lecture 03 - 05	To build up their confidence level & increase creativity on chapter-03 & 05	Must be submitted within the next two lecture.
12	Chapter-06	6.1 Define the following terms: (i) Dissolved oxygen (DO). (ii) Biochemical oxygen demand (BOD). (iii) Chemical oxygen demand (COD). (v) Threshold limit value (TLV). 6.2 Mention the method of determination of pH value of water.	➤ To know about the measure system DO, BOD, COD.	Need PH meter, <a href="https://youtu.be/T21OO0sBBfc">https://youtu.be/T21OO0sBBfc</a>
13	Chapter-06 Understand the water as a component of environment.	6.3 determination of (BOD) and (COD) in a sample of water.	➤ To know about how to determination of BOD & COD in a sample of water.	Sample, Water jar, Chemical. YouTube video link - <a href="https://youtu.be/T21OO0sBBfc">https://youtu.be/T21OO0sBBfc</a>
14	Class Test(02)	Chapter: 6	➤ Good concept the chapter.	
MID TERM EXAM				
15	Chapter-07 Understand the soil as a component of environment.	7.1 Describe the constituents of soil. 7.2 Describe the effects of soil pollution.	➤ To know about the soil structure.	YouTube video link - <a href="https://www.youtube.com/watch?v=wVvI4Om1Ru4">https://www.youtube.com/watch?v=wVvI4Om1Ru4</a>
16	Chapter-08 Understand the concept of solid waste management.	8.1 Define solid waste, refuse, garbage, rubbish, trashes, demolition and construction waste, e-waste, agricultural waste, pathological waste, radioactive waste,	➤ To know about the soil concept.	YouTube video link - <a href="https://www.youtube.com/watch?v=nL354fxAfBk">https://www.youtube.com/watch?v=nL354fxAfBk</a>
17	Chapter-09 Understand the development and environment	9.1 Mention the classification of solid waste. 9.2 Describe the recycling of solid wastes.	➤ To know about the classification of solid waste.	YouTube video link - <a href="https://www.youtube.com/watch?v=tl-68EVZX_k">https://www.youtube.com/watch?v=tl-68EVZX_k</a>
18	Quiz Test(03)	Chapter: 7-8	Good concept the chapter.	
19	Chapter-09	9.4 Define urbanization Describe the effects of urbanization on environment. 9.5 Define industrialization.	➤ To know about the urbanization on environment.	YouTube video link - <a href="https://www.youtube.com/watch?v=ySB-EVvY8zc">https://www.youtube.com/watch?v=ySB-EVvY8zc</a>
Assignment-03		Assignment on lecture 06 - 09	To build up their confidence level & increase creativity on chapter-06 & 09	Must be submitted within the next two lecture.

20	Chapter-10 Understand the global environmental challenges.	10.1 Define greenhouse gas and greenhouse effects. 10.2 Describe the causes and consequences of greenhouse effects.	➤ To know about the greenhouse effects.	YouTube video link - <a href="https://www.youtube.com/watch?v=BPJJM_hCFj0">https://www.youtube.com/watch?v=BPJJM_hCFj0</a>
21	Class Test(04)	Chapter: 8-9	➤ Good concept the chapter.	
22	Chapter-10	10.3 Describe acid rain. 10.4 Describe importance of ozone layer. 10.5 Describe chemicals pesticides.	➤ To know about the ozone layer.	YouTube video link - <a href="https://www.youtube.com/watch?v=Nf8cuvl62Vc">https://www.youtube.com/watch?v=Nf8cuvl62Vc</a>
23	Chapter-10	10.4 Describe ozone layer depletion mechanism 10.5 Describe hazardous waste.	➤ To know about the hazardous waste.	YouTube video link - <a href="https://www.youtube.com/watch?v=Bz9sc5Jgsvc">https://www.youtube.com/watch?v=Bz9sc5Jgsvc</a>
Assignment-04		Assignment on lecture 09 - 10	To build up their confidence level & increase creativity on chapter-09 & 101	Must be submitted within the next two lecture.
24	Chapter-11 Understand the legislative protection of environment.	11.1 Define environmental impact assessment (EIA) and environmental auditing (EA). 11.2 Mention environmental act and legislations prescribed for air, noise,	➤ To know about the act of environment.	YouTube video link - <a href="https://www.youtube.com/watch?v=3fbEVytyJck">https://www.youtube.com/watch?v=3fbEVytyJck</a>
25	Final Test	Chapter: all	➤ Good concept the chapter.	
26	Review Class	Chapter: 1-3 (Regarding studentsproblem)	Students problem solve.	
28	Review Class	Chapter:6-7 (Regarding students problem)	Students problem solve.	
29	Review Class	Chapter: 8-10(Relating students problem)	Students problem solve.	
30	Presentation	Short presentation by individual student.	➤ Be confident on practical life.	Laptop, projector
31	Presentation	Short presentation by individual student.	➤ Be confident on practical life.	Laptop, projector
Semester Final Exam				