

D.A.V College, Hoshiarpur

Value Added Course on

Moving Towards A Sustainable Environment

Description: To introduce the essential concepts of environment and sustainable development to undergraduate students in order to inculcate sense of responsibility

Objectives and Learning Outcomes:

- Students become aware of the total environment, its problems and its relation to economic and social aspects
- Get knowledge of challenges facing the environment and ways to achieve sustainable development
- Acquire knowledge, skills, social values, and strong concern for the environment and motivations for active participation in its improvement and protection.
- Understanding of natural resources and need to preserve these
- Become aware of concept and importance of sustainability

Unit I

Environment, Components of Environment, Ecosystem and its types, Food chain and Food web, Ecological Pyramids

Unit II

Pollution, Types of Pollution, Water Pollution, Air Pollution, Soil Pollution, Land Pollution, Causes, Effects and Control Measures

Unit III

Meaning of Biodiversity, Hotspots of Biodiversity, Threats to Biodiversity, Conservation of Biodiversity, In situ and Ex Situ Conservation

Unit IV

Meaning of sustainability, Global Environmental issues, Energy Resources and Sustainable Energy Options, Sustainable Development Goals (SDGs)

Suggested Readings

1. *Richard T. Wright, Dorothy F. Boorse (2017) Environmental Science: Toward A Sustainable Future, Pearson, 13th Edition*
2. *G. Tyler Miller and Scott Spoolman (2018) "Living in the Environment", International Edition*
3. *Eldon D. Enger (2016) "Environmental Science: A study of interrelationships"*

4. Arora. S. ,(2008), *Fundamentals of Environmental Biology*, Kalyani Publishers,
5. Sharma, P. D. 1998, *Ecology and Environment*, Rastogi publication, Meerut
6. Agarwal, K.M., Sikdar, P.K., Deb., S.C (2005) *A Text Book of Environment*, Macmillan India Limited.

Evaluation Criteria

Attendance - 05

Assignment - 15

Power Point presentation - 20

Viva- 10

Final Exam- 50