



**Darrang College
(Autonomous),
Tezpur-784001**

**Syllabus for
FYUGP
VAC-01014
Environmental Studies**

Approved by :

Academic Council vide Resolution no. 04, dated- 12/08/2025

VAC-01014
VAC - Environmental Studies
FYUGP 1st Semester (B.A, B.Sc & B.Com)
Distribution of marks: 60 – End Semester Theory, 40 – Internal Assessment
Course level:100-199

No. of Credits: 4

No. of hours: 60

Lectures

Unit1: Introduction to Environmental Studies

10

- Multidisciplinary nature of environmental studies;
- Scope and importance;
- Basic concepts: Renewable resources, non renewable resources, Common Property resources, Tragedy of commons, Climate change, global warming
- Concept of sustainable development

Unit 2: Ecosystems

15

- What is an ecosystem? Difference between ecology and ecosystem.
Structure and function of ecosystem: Energy flow in an ecosystem: food chains, food web and ecological succession.
- Case studies on any one of the following
 - a) Forest ecosystem
 - b) Grassland ecosystem
 - c) Aquatic ecosystems (ponds, streams, lakes, rivers)
 - d) Mountain ecosystem

Unit 3: Environmental Pollution

10

- Environmental pollution: types, causes, effects and controls; Air, water, soil and noise pollution
- Solid waste management: Control measures of urban and industrial waste.

Unit 4: Environmental laws

10

- Environment Laws: Environment Protection Act; Air (Prevention & Control of Pollution) Act; Water (Prevention and control of pollution) Act; Wildlife Protection Act; Forest Conservation Act. International agreements, policies and treaties

Unit 5: Local Environmental Problems

15

- Study of local environmental problems and their solutions.

Suggested Readings:

1. Bharucha Erach : Text book on Environmental Studies, UGC, New Delhi
2. Carson, R 2002. Silent Spring. Houghton Mifflin Harcourt.
3. De A.K.: Environmental Chemistry, Wiley Eastern Ltd.
4. Kaushik Anubha and C.P.Kaushik : Perspective in Environmental Studies, New Age International
5. Rajagopalan, R. (2018). Environmental Studies. (3rd Edition) Oxford University Press
6. S. C. Santra (2011): Environmental Science, New Central Book Agency

Graduate Attributes

I. Course Objective:

The course objective is to develop an understanding of the basic concepts of environmental studies. This course will help to know the environment around us. It also gives an idea of various laws to protect environment.

II. Learning Outcome:

- After going through this course students can visualize the importance of environment for human mankind. This course will help to make an understanding of the various concepts which are frequently used by us. This course also enable students to know the problems of a particular environmental event through case studies and also help them to go through the various available laws that can minimize the environmental problems.

Theory Credit: **2**

No. of Required Classes: **30**

No. of Contact Classes: **30**

No. of Non-Contact Classes:**0**