# NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI

Course Title	Environmental Science			
Course Code	AR101		No. of Credits	3
Department	Architecture	HOWEL CO.	Faculty	Prof. S. Rajendra Babu
Pre-requisites Course Code	-NIL-			
Course Coordinator(s)	-Nil-			The second second
Course Teacher / Tutor E-mail	rajbabu@nitt.edu		Tel. No.	0416-2503556
Course Type	☑ Core course ⊠ Elective course			

## COURSE OVERVIEW

This course deals with various aspects of the environment around us. The following topics will be covered – The multidisciplinary nature of environmental studies, Natural resources, Ecosystems, Biodiversity, Pollution, Social issues, Human population issues. Some field visits will also be arranged.

# COURSE OBJECTIVES

This course is aimed to provide exposure to the various concepts related to understanding the different aspects of the environment. Also to provide valuable methods of relating environmental issues to what is happening in our daily lives.

### COURSE OUTCOMES (CO)

Course Outcomes	Aligned Program Outcome (Po	
<ol> <li>Understand the various aspects of the environmental issues like what causes environmental degradation and what the likely solutions are.</li> </ol>	It is hoped by understanding how our daily activities affect the environment, our attitudes will undergo a significant	
<ol><li>Understand the different alternative solutions to improve environmental quality.</li></ol>	change.	
<ol> <li>Understand how as groups or individuals we can contribute to improving the environment.</li> </ol>	SECOND VIEW SHICK N. C. O. MYSSEP SHI	

COURSE TEACHING AND LEARNING ACTIVITIES

No	Week	Topic	Mode of Delivery	
1	1	Multidisciplinary nature of EVS – Definition, Scope & Importance	Conventional / assignments	
	2	Multidisciplinary nature of EVS – Need for public awareness	Conventional / assignments	
	3	Natural resources - Renewable, Non renewable	Conventional / assignments	
	4	Natural resources - Role of individual in	Conventional / assignments	
		conservation of resources, Equitable use of resources		
	5	Ecosystems - Concept, structure, components	Conventional / assignments	
	6	Ecosystems - Energy flow, Succession, Food chain	Conventional / assignments	
	7	Biodiversity & its conservation – Biogeographic classification, Value of biodiversity	Conventional / assignments	
	8	Biodiversity at various levels, India as a mega diversity nation, Threats & Conservation	Conventional / assignments	
	9	Environmental pollution – Causes, Effects & Control measures	Conventional / assignments	
	10	Environmental pollution – Solid waste management, Role of individuals in pollution prevention	Conventional / assignments	
	11	Social issues – Sustainable development, Urban problems, Water conservation, Resettlement issues	Conventional / assignments	
	12	Social issues – Environmental ethics, Climate change, Consumerism, Various laws, Public awareness	Conventional / assignments	
	13	Human population growth, Health, Human rights	Conventional / assignments	
	14	Value education, Women & child welfare, Role of IT in environment & health	Conventional / assignments	

No	Mode of Assessment	Week / Date	Duration	% Weightage 20%	
1	Short class tests - 4 nos.	28 sep. / 19 oct. / 9 nov. / 30 nov.	15 minutes		
2	Assignment - News	01 to 12th week	-Ulb - I- I- I- I- I	10%	
3	Assignment - Activities	01 to 12 <sup>th</sup> week	Deline Line Store	15%	
4	Study trips & reports (before & after trips) - 2 nos.	Trip 1 in Sep., Trip 2 in Oct. / Reports within 1 week before & after each trip	Mostly one day trips on weekends	15%	
5	Final Exam	End of semester	2 Hours	40%	

ESSENTIAL READINGS: Textbook, reference books, articles from the internet, newspapers, etc

### Text Books & Reference Books::

- 1. Erach Bharucha, Textbook for Environmental Studies. UGC 2004
- 2. Center for Science & Environment, Down to Earth
- 3. Hawkins RE, Encyclopedia of Indian Natural History, Bombay Natural History Society, Bombay
- 4. Jadhav H and Bhosale VM, 1995, Environmental Protection & Laws, Himalaya Publishing House, Delhi
- 5. Mckinney ML and Schoch RM, 1996, Environmental Science Systems and Solutions

#### COURSE EXIT SURVEY

Feedback from the students during mid & end semester: on knowledge gained, subjects / activities relevant to the course, the methodology adopted, an aspect of improvement, whether the topics fulfil the course outcome and program outcome.

COURSE POLICY (including plagiarism, academic honesty, attendance, etc.)

- Students to have a minimum of 75% attendance to appear in the final examination. Relaxation for a maximum of 10% would be considered only for valid reasons & supported by evidence.
- Students found with any kind of malpractice in assignments / reports / activities / test or exam will be awarded zero marks for that work.
- If a student misses class test(s) only one retest will be conducted, only for valid reasons of absence & supported by evidence.
- Students are expected to be prepared to remain in exam hall for the entire <u>duration of writing the test / exam</u>.
  They can leave the exam hall any time after first 30 minutes, after handing over answer books.
- Assignment submission after the time limit, will not be generally accepted, unless for valid reasons & supported by evidence. Students are advised to take prior permission if any delay is anticipated.
- Preventing other students from pursuing their academic activities will be considered as academic offences & such issues will be taken to disciplinary committee & decisions made will be implemented.
- Any activity by a student hindering the academic activities of the faculty will be considered as academic misconduct & will be referred to disciplinary committee & decisions made will be implemented.
- 8. Study trips will be arranged only when all the students cooperate with the process & follow instructions during the trip. If the students are non-cooperative or do not follow instructions, the trip will be cancelled and alternative assignment will be introduced. If a student could not join a trip due to valid reason (to be supported by evidence), it is student's responsibility to make a suitable alternative educational visit on one's own effort within one month & submit pre visit & post visit reports, though the faculty can help to find one.

#### ADDITIONAL COURSE INFORMATION

The faculty will be available for consultation at his faculty room between 3.00 pm to 4.00 pm on Wednesdays when the students have free time on their timetable.

FOR SENATE'S CONSIDERATION

Course Faculty

CC-Chairperson

HOD