



INSTRUCTION DIVISION, FIRST SEMESTER 2011-2012  
COURSE HANDOUT (PART II)

Date: 01.08.2011

In addition to Part – I (General Handout for all courses) printed on Page 1 of the timetable book; this portion gives further specific details regarding the course.

**Course Number** : BITS C213

**Course Title** : INTRODUCTION TO ENVIRONMENTAL STUDIES

**Instructor In-charge** : P SANKAR GANESH

**Instructor** : VS Rao, Suman Kapur, Meera Lal, P Lalitha, Murari RR Varma, P Sankar Ganesh

**Course Description** :

This course is meant for first-degree students of any discipline. The course has come about in the wake of the landmark judgment of the Supreme Court of India 2003, to prescribe a course on the environment for students of first degree in all universities and colleges. This course pertains to each and every individual, their families, communities, humanity and this fragile planet. The course introduces multi-disciplinary approach to the study of various environmental issues. The approach will facilitate participatory learning about importance of conservation, preservation and protection of the environment and striving towards a life in perfect harmony with nature.

**Scope and Objectives** :

The course aims at exposure to various environmental issues (regional, national and international), relevant sources of information about different issues including environmental systems and functions, environmental problems and solutions, role of public and Govt., etc. The course aims at preparing students for undertaking self-study of different aspects of environmental study. The course aims at generating useful ideas, concepts for meaningful field work in the immediate environment, exposure to internet resources for information on environmental issues, and self-study of books, journals, and magazines on the subject. Further the course aims at facilitating weekly interactive sessions for information exchange, so as discover how an individual can make a difference to the state of environment.

**Organization** :

As a part of course assignment, the students will be required to identify issues pertaining to local environment on campus and/or nearby areas and develop survey questionnaire, to determine base line for further development. Also, students will develop and implement plan of action to be able to present results of the implementation. Each student will submit report on the activity undertaken and a brief write-up on the work accomplished, which will be included in the publication entitled "In Touch with Our Environment". This document will be made available to all others who wish to continue the project or similar projects.

Students will learn by collecting information from various sources of information. Students will be required to prepare for evaluation components, through self-study of prescribed text books and reference books. The course will offer opportunities for presenting information on subjects studied, through technical reports, seminars and viva, etc. Weekly meeting for consultation will be conducted during 10<sup>th</sup> Hour on Tuesday. All evaluation components will be conducted during the said hour.

**Textbook** :

**T:** Erach Bharucha, Textbook of *Environmental Studies for Undergraduate Courses*, University Press, 2010 reprint.

**Reference Books :**

- R1:** R. J. Ranjit Daniels, J. krishnaswamy, *“Environmental Studies”*, Wiley India, 1<sup>st</sup> Ed., 2009.  
**R2:** R. Rajagopalan, *“Environmental Studies-From Crisis to Cure”*, Oxford University Press 11<sup>th</sup> Ed., 2009.  
**R3:** Peter Stiling, *“Ecology Theories and Applications”*, Prentice Hall India, 4<sup>th</sup> Ed., 2007.  
**R4:** M. C. Dash, *Fundamentals of Ecology*” 2<sup>nd</sup> Ed., Tata McGraw Hill, 10<sup>th</sup> Reprint, 2008.  
**R5:** E.J.Kormondy, *“Concepts of Ecology”*, 5<sup>th</sup> Ed, Prentice Hall India.  
**R6:** Scott F. Gilbert and Epel, *“Ecological Developmental Biology: Integrating Developmental Biology: Integrating Epigenetics, Medicine, and Evolution”*. Sinauer Associates Inc., 2008.  
**R7:** S.K.Agarwal, *“Water Pollution”*, A.P.H Publishing Corporation, New Delhi, 2009.  
**R8:** W.Wesley Eckenfelder *“Industrial Water Pollution Control”*, by, McGraw-Hill Intl Ed, 1999.  
**R9:** S.A.Abbasi, *“Environmental pollution and its control”*, Discovery Publishing House Pvt Ltd, 2010.  
**R10:** A.P.Thirlwall, *“Growth and Development”*, 8<sup>th</sup> Ed., Palgrave Macmillan, 2005.

**Reference Websites :**

1. [www.positivehealth.com/permit/Updates/rudenvir.htm](http://www.positivehealth.com/permit/Updates/rudenvir.htm)
2. [www.atree.org](http://www.atree.org)
3. [www.cseindia.org/](http://www.cseindia.org/)
4. [www.epa.gov/sciencenotebook/](http://www.epa.gov/sciencenotebook/)
5. [www.earthday.net](http://www.earthday.net)
6. [www.bestpractices.org](http://www.bestpractices.org)
7. [www.timesofindia.com](http://www.timesofindia.com)
8. [www.thesun.com](http://www.thesun.com)
9. [www.nytimes.com](http://www.nytimes.com)
10. [www.dailymail.co.uk](http://www.dailymail.co.uk)
11. [www.washingtonpost.com](http://www.washingtonpost.com)
12. [www.ccpo.odu.edu/SEES/](http://www.ccpo.odu.edu/SEES/)
13. [http://library.thinkquest.org/26026/Environmental\\_Problems/environmental\\_problems.html](http://library.thinkquest.org/26026/Environmental_Problems/environmental_problems.html)
14. [www.wm.com](http://www.wm.com)
15. [www.wwf.org](http://www.wwf.org)
16. [www.recycline.com](http://www.recycline.com)
17. [www.ran.org](http://www.ran.org)
18. [www.onaturals.com](http://www.onaturals.com)
19. [www.natureconservancy.org](http://www.natureconservancy.org)
20. [www.nrdc.com](http://www.nrdc.com)
21. [www.microplanet.com](http://www.microplanet.com)
22. [www.organicclothes.com](http://www.organicclothes.com)

**Course Plan :**

Sl. No.	Topic of Syllabus	Units from Text Book	To be completed within	Instructor(s)
1.	Introduction, Ecosystem, Evolution and Bio-diversity	1, 3 & 4	3 <sup>rd</sup> to 4 <sup>th</sup> week	P. Sankar Ganesh V. S. Rao
2.	Impact of Population and Economic Growth on the Environment	6 & 7	5 <sup>th</sup> to 8 <sup>th</sup> week	Meera Lal P. Lalitha V. S. Rao
3.	Sustainable Development, Environmental Quality, Waste Management, Air, Water Pollution	5	9 <sup>th</sup> to 12 <sup>th</sup> week	Meera Lal P. Sankar Ganesh Murari RR Varma
4.	Impacts on Environment and Mitigation Schemes	6	13 <sup>th</sup> to 16 <sup>th</sup> week	Suman Kapur Murari RR Varma

**Examination Scheme :**

All evaluation components will aim at evaluating a student's performance in terms of commitment to topics, presentation skills and information gathered, as follows:

<b>Evaluation Component</b>	<b>Weightage (%)</b>	<b>Time</b>	<b>Venue</b>
Activity based on assignments* for Participation, Seminars, Technical Report and write-up	10% + 15% + 25% = <b>50%</b>	Tuesday, 10 <sup>th</sup> Hr	G 101
Test-I	25%	During 8 <sup>th</sup> Week- 13/09/2011	To be announced
Test-II	25%	During 15 <sup>th</sup> Week- 08/11/2011	To be announced

\*Scope of assignment will include short term activity relevant to objectives of the course. Exact dates for the assignments will be announced later.

**Chamber consultation hour:** Tuesday, 5:00PM to 6:00PM.

**Grading policy:** Award of grades will be guided in general by the histogram of marks. Decision on border line cases will be taken based on individual's sincerity, student's regularity in attending classes, and the instructor's assessment of the student.

**Make-up policy:** Make-up for Test 1 or 2 will be given only in genuine (medical emergency) cases of absence. If the absence is anticipated, before the examination, prior permission of the Instructor-in-charge is necessary. The request for make-up should reach the Instructor-in-charge at the earliest. Make-ups for class tests/ quizzes and assignments are not given. Also refer to Clause 4.07 of BITS *Academic Regulations* for more details.

**Notices:** All notices/ announcements regarding this course shall be displayed in the notice board of Biological Sciences Group, located at the 1<sup>st</sup> floor of A-Block.

**Instructor In-charge**  
**BITS C213**