

LIS- 403:E3 **Environmental Information Systems**
(4 Credits)

Objectives:

- To understand development of environmental sciences with a view to familiarize with tools useful to various stakeholders in imparting information
- To sensitize students in planning and designing of local information systems pertaining to various environmental related Programmes

Method of Instruction: A combination of lectures, group discussions, guest lectures (where possible) and special presentations will form methods of instruction. The module will follow with an examination at the end of the semester carrying 80 marks covering all units having three types of questions (long, short and very short) to be solved within 2 1/2hrs. Besides, internal assessment of 20 marks will be assessed on attendance, performance in presentations, assignments and symposiums.

UNIT I: Environmental Sciences

- 1.1 Environmental Sciences: Concept, Scope and Development
- 1.2 Environmental Sciences Information organizations: National and International –
- 1.2.1 Green Peace International
 - 1.2.2 International Institute of Environment and Development
 - 1.2.3 International Institute for Sustainable Development (Canada)
 - 1.2.4 World Conservation Monitoring Center (WCMC) (U.S.A)
 - 1.2.5 Wildlife Trust of India (India)
 - 1.2.6 The Environment Support Group (India)
 - 1.2.7 Environmental Defence
 - 1.2.8 World Conservation Organization (IUCN)

UNIT II: Information Needs, Pattern and Sources

- 2.1 Environmental Sciences Information Sources: Documentary and Non Documentary
- 2.2 Information Sources on the Web. : Online Journals, Online Books, ETDs, Databases, Online proceedings etc. [ECOLEX](#) : a gateway to environmental law

- 2.3 Information Vocabulary Control Tools: ENVOC, [Multilingual thesaurus of environmental terms](#), General multilingual environmental thesaurus (GEMET)
- 2.4 Information Needs and Information Seeking pattern of Environmental Science Professionals: An Overview

UNIT III: Information Systems, Services and Tools

- 3.1 Environmental Sciences information systems: National and International
- 3.1.1 Environmental Information System - ENVIS (India)
- 3.1.2 CIESIN: The Consortium for International Earth Science Information Network
- 3.1.3 California Environmental Resources Evaluation System (CERES) (U.S.A)
- 3.1.4 Conservation International (USA)
- 3.2 Major search Tools: Search Engines, Portals and Gateways etc.

UNIT IV: Information Support, Designing and Implementation

- 4.1 National and International Library and Information support to Environmental Sciences information: Contribution of
- 4.1.1 Centre for Environmental Science libraries (Maryland, USA)
- 4.1.2 Envirolink library: the Online Environment Community
- 4.1.3 Food, Agriculture and Environmental science (Ohio state University library).
- 4.1.4 Electronic Environmental Resource Library (EERL)
- 4.1.5 National Council for Science and Environment (National Library for the Environment) (USA)
- 4.2. Designing a model Environmental Sciences Information System: Planning, tools, problems and perspectives.

Suggested Reading:

- Allaby Michael. (2002). *Basics of environmental science*. (2nd ed) : London Routledge.
- Bharucha, Frach. (2005). *Textbook of Environmental Studies*: Hyderabad. Universities Press.
- Ghanta, Ramesh. (2003). *Environmental Education*: New Delhi. Discovery Publishing.
- McGraw-Hill Encyclopedia of Environmental Science. (1974). (Edited by [Sybil P. Parker](#))
- Mongillo, John.(2004). *Encyclopedia of Environmental Sciences*. Oxyx Press.
- The Environment Encyclopedia and Directory.(1998) (2nd ed.):London.Europa Publishing.
- Tripathy, Debi Prasad.(200). *Dictionary of Environmental Science*:New Delhi..A.P.H Pub.

Websites: (Illustrative)

California Environmental Resources Evaluation System (CERES).

Available at:

<http://www.ceres.ca.gov/>

Centre for Environmental Science libraries. Available at:

<http://www.cbl.umces.edu/Library/index.html>

CIESIN: The Consortium for International Earth Science Information

Network. Available at:

<http://www.ciesin.columbia.edu/>

Electronic Environmental Resource Library. Available at:

<http://www.eerl.org/>

Environmental Defense

www.environmentaldefense.org/

Environmental Information System – ENVIS. Available at:

<http://www.envis.nic.in/>

Envirolink: the Online Environment Community. Available at:

<http://www.envirolink.org/>

eScholarshipeditions.(2007). California Digital Library. Available at:

<http://content.cdlib.org/escholarship/>

Food, Agriculture and Environmental science (Ohio state university library). Available at:

<http://library.osu.edu/sites/faes/>

Geoindex. Available at:

<http://www.geoindex.com/geoindex/>

Green Peace International

www.greenpeace.org

International Institute of Environment and Development

<http://www.iied.org/aboutiied/index.html>

International Institute for Sustainable Development

www.iisd.org/

National Council for Science and Environment. Available at:

<http://ncseonline.org/>

National Library for the Environment. Available at:

<http://www.cnie.org/nle/>

NCSU Libraries. Available at
www.lib.ncsu.edu/browsesubjects/?subject=33&subject_group=10

The Environment Directory. Available at:
<http://www.webdirectory.com/>

The Environment Support Group
www.esgindia.org/

World Conservation Monitoring Center (WCMC) (U.S.A)
www.unep-wcmc.org/

World Conservation Organization
www.iucn.org/

Wildlife Trust of India
www.wildlifetrustofindia.org/