



LEAD CITY UNIVERSITY
Faculty of Sciences
Department of Environmental Management and Toxicology

COURSE PARTICULARS

Course Code: EMT 212
Course Title: Environment, Ecosystems and Management
Course Units: 2
Course Status: Compulsory

LECTURERS' DETAILS

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And

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Area of Specialization: Environmental Management

Introduction

Man depends on the environment for his survival, hence the importance of the environment and ecosystem cannot be over-emphasized. The course is designed to provide knowledge in the area of population, community, ecosystems, environment and environmental factors. Study of communities and ecosystem, abandons, density, yield, cover, frequency will be done. Also, the ecology of niche, niche overlap completion co-existency, resource shift. Habitat: the primary terrestrial and aquatic habitat which affects man. Alteration imposed on the habitat by man.

Course objectives

The aim of the course is to broaden the student's knowledge integration of ecology and environment into development planning.

- ❖ Ecological management
- ❖ Eco-development and integrated development.
- ❖ Environmental planning principles
- ❖ Interdisciplinary and not multidisciplinary
- ❖ Holistic, comprehensive, participative, coordinated approach
- ❖ Integrated and continuous planning

Teaching plan

| | |
|---------|---|
| Week 1 | Population, Community, and Ecosystems |
| Week 2 | Environment and Environmental factors |
| Week 3 | Density, Yield-Cover frequency |
| Week 4 | The Ecology of Niche and Niche overlap completion |
| Week 5 | Co-existence and Resource shift |
| Week 6 | Habitat: the Primary Terrestrial and Aquatic Habitats |
| Week 7 | Alteration Imposed on the Habitat by Man |
| Week 8 | Integration of Ecology and Environment into Development Planning |
| Week 9 | Ecological management, Eco-development and integrated development |
| Week 10 | Environmental Planning Principles |
| Week 11 | Holistic, and coordinated approach to Environmental Management |
| Week 12 | Revision |
| Week 13 | Test |
| Week 14 | Examination |

Course requirement

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|-------------------|----------|------------------|
| Class attendance | - | 5 marks |
| Assignment | - | 15 marks |
| Test(s) | - | 20 marks |
| Final examination | - | 60 marks |
| Total | - | 100 marks |

Reading list

- Ajayi, S.S. (1986): Wildlife in crisis-conservation An Antidote. University of Ibadan Inaugural Lecture: Thursday, February 27, 1986, University of Ibadan, Nigeria.
- Ajayi, S.S. (2002): Multipurpose Forest Management for Bushmeat Production: a success story from West Africa. Pp 2-5
- Ayodele, A.I. (2001): Wildlife Based Tourism in Nigeria. In cultural and Ecotourism Development in Nigeria, David Aremu (Ed), *Hope Publications*, Pp. 118 – 127.
- Ayodele, A.I. (2001): Management of Tourism potentials in Nigerian National Parks. In cultural and Eco-tourism Development in Nigeria, David A. Aremu (Ed.), *Hope Publications*, Pp. 136 – 143.
- Ayodele, I. A. (2002): Essentials of Tourism management. El-Shaddai publications, Ibadan, Nigeria.
- Ayodele, I. A. and Lameed, G. A. (1999): Essentials of Biodiversity Management: The Current Status of Biodiversity Management. Ibadan. 74pp
- Bachrach, P. & Botwinick, A. (1992): Power and empowerment: A radical theory on participatory democracy. Temple University Press, Philadelphia.
- Butler, J. R. (1992): Ecotourism: It's changing face and evolving Philosophy. Paper presented at the World Congress on National Parks and Protected Areas IV, February 10-21, Caracas, Venezuela.
- Campbell, L. M. (2002): Conservation narratives and the “received wisdom” of ecotourism: case studies from Costa Rica. *International Journal of Sustainable Development*, 5(3), 300-325

Ceballos-Lascurain, H., (1996): Tourism, Ecotourism and Protected Areas: The State of Nature-Based Tourism around the World and Guidelines for its Development. IUCN, Gland, Switzerland.

Duffy, R. (2002): A trip too far: Ecotourism, politics and exploitation. Sterling: Earthscan Publication

Tutorial questions

1. Discuss the following terms:
 - a. levels of biological organisation
 - b. ecology
 - c. environment and development
2. Explain ecosystem services. What is biological diversity?
3. Discuss the following in the light of ecosystem management:
 - a. Density
 - b. Environmental components
 - c. Dispersion
4. The ecological niche and niche overlap completion is more pronounced in terrestrial ecosystem. Discuss
5. Highlight and discuss 5 different ecosystem interactions
6. Explain the types of terrestrial ecosystem
7. Discuss the aquatic ecosystem and identify important elements for habitat survival
8. Discuss the basic principles employed in environmental management.
9. With the aid of a diagram, identify and discuss the components of ecosystem
10. With examples, discuss the concept of Eco development
11.
 - a. Identify and explain the types of biodiversity
 - b. discuss the positive interactions in ecosystem
12.
 - a. Discuss the macro elements of the environment
 - b. With the aid of a diagram, discuss either carbon or nitrogen cycle.