



THE FEDERAL UNIVERSITY OF TECHNOLOGY, AKURE

Department of Urban and Regional Planning

URP103 – Nature of Environmental Science

COURSE PARTICULARS

Course Code: URP103

Course Title: Nature of Environmental Science

No. of Units: 2

Course Duration: Two hours of theory per week for 15 weeks.

Status: Compulsory

Course Email Address: urp103@gmail.com

Course Webpage: <http://www.urp.futa.edu.ng/courseschedule.php?coursecode=URP%10103>

Prerequisite: NIL

COURSE INSTRUCTORS

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COURSE DESCRIPTION

This course will give the students an understanding of the origin, growth and decline of settlements as a reflection of social economic, political and physical forces. It will inform students about industrial settlements and contemporary human settlements in developed and developing countries. The influence of the philanthropic movement on town planning, public health laws, and garden city movements will equally be discussed. Also, issues of Land Tenure

System will be discussed Case studies of towns in Nigeria both historic and contemporary ones will be highlighted. Issues of urbanisation process will also be discussed. The merits and demerits of advances in Science and Technology will equally be highlighted.

COURSE OBJECTIVES

Objectives of the course are

- introduce students to the various fields of environmental science and the interrelationships between them
- to highlight very salient issues in the environment
- impart knowledge on various environmental problems

COURSE LEARNING OUTCOMES / COMPETENCIES

Upon successful completion of this course, the student will be able to understand the:

- Relationship of town planning with other environmental disciplines.
- Factors affecting the siting and development of villages and towns.
- Effects of advances in sciences, technology, medicine and public hygiene.
- System of land tenure and land use and the philosophy of town planning and new towns.
- The social and economic forces and their effects on a demand for shelter and means of movement.
- The assessment of demand on and of the environment, control of development, maintenance and improvement of the environment.

GRADING SYSTEM FOR THE COURSE

This course will be graded as follows:

Class Attendance	10%
Assignment	10%
Test(s)	20%
<u>Final Examination</u>	<u>60%</u>
<u>TOTAL</u>	<u>100%</u>

GENERAL INSTRUCTIONS

Attendance: It is expected that every student will be in class for lectures and also participate in interactions in the class. Attendance records will be kept and used to determine each person's qualification to sit for the final examination. In case of illness or other unavoidable cause of absence, the student must communicate as soon as possible with any of the instructors, indicating the reason for the absence.

Academic Integrity: Violations of academic integrity, including dishonesty in assignments, examinations, or other academic performances are prohibited. You are not allowed to make copies of another person's work and submit it as your own; that is plagiarism. All cases of

academic dishonesty will be reported to the University Management for appropriate sanctions in accordance with the guidelines for handling students' misconduct as spelt out in the Students' Handbook.

Assignments: Students are expected to submit assignments as scheduled. Failures to submit an assignment as at when due will earn the particular student a zero score for that assignment. Only under extenuating circumstances, for which a student has notified any of the instructors in advance, will late submission of assignments be permitted.

Code of Conduct in Lecture Rooms: Students are to turn off their cell phones during lectures. Students are prohibited from engaging in other activities (such as electronic messaging, side talks, etc.) during lectures. Lateness to class is also prohibited.

READING LIST

^{3,5}Howard, E. (1902): *Garden Cities of Tomorrow*. Massachusetts: MIT Press.

^{3,5}Meller, H. (1994): *Patrick Geddes: Social Evolutionist and City Planner*, Routledge: New York.

^{3,5}Batty, M. and Marshall, S. (2009): The Evolution of Cities: Geddes, Abercombie and the New Physicalism. *Town Planning Review*, 80(6), 551-574

^{3,4}Chapin, F. S. (1972): *Urban Land Use Planning* (2nd edition). London: Illinois: University of Illinois Press.

^{3,4}Dimitris, L. (2008). Introduction. *Tourism Issues*, 4(1), 6.

³Keeble, L. (1978). *Principles of Town and Country Planning*. London: Estate Gazettes Ltd.

⁴Okecha, A.O. (2000): *Pollution and Conservation of Nigeria's Environment*. Owerri: T' Afrique International Associates.

^{2,4,5}Omole F. K. (1999). *Planning Issues in Nigeria: Land Tenure System and the Land Use Act*. Lagos: Frontline Publications Ltd.

³Sjoberg, G. (1965). Origin and Evolution of cities. *Scientific American*, 213(3), 54-63.

²World Bank (1991). *Environmental Assessment Source Book*. Vol 1. Technical Paper 139. Washington: World Bank.

²World Commission on Environment and Development (1987). *Our Common Future*. Oxford: Oxford University Press

Legend

- 1- Available in the University Library
- 2- Available in Departmental/School Libraries
- 3- Available on the Internet.
- 4- Available as Personal Collection
- 5- Available in local bookshops.

COURSE OUTLINE

Week	Topic	Remarks
1	Environmental Science and Interrelationship <ul style="list-style-type: none"> • Environment - definition and scope • Responsibilities and interrelationships 	Students are expected to know the various environmental science fields and the interrelationship existing between them.
2	Factors responsible for creation of past settlements <ul style="list-style-type: none"> • Origin of early settlements 	Students are expected to know the factors responsible for the creation

	<ul style="list-style-type: none"> • Factors responsible for the creation of modern settlement 	of past settlements as well as the factors responsible for the creation of modern settlements
3	<p>Factors responsible for creation of future settlements</p> <ul style="list-style-type: none"> • Consideration for locating new settlements • Cultural Factors • Natural Factors 	It is expected that students will be able to familiarise with the factors to be considered in the creation of new settlements; such cultural and natural factors.
4	<p>Effects of social forces on demand for shelter and transportation</p> <ul style="list-style-type: none"> • Social forces • Economic forces • Environmental problems in Nigeria- social aspect 	The effects of social and economic forces in the shaping of settlements should be understood by students coupled with the various environmental problems affecting demand for shelter and transportation.
5	<p>Land Tenure System</p> <ul style="list-style-type: none"> • The Traditional Tenure System • Nigerian Land Tenure System • Land Use Decree of 1978 	Students should understand the common characteristics of Land Tenure system across the globe and the Nigerian Tenure System before the Land Use Act of 1978. They are equally expected to familiarise with the reasons for enacting the Land Use Act.
6	<p>Philosophy of planning</p> <ul style="list-style-type: none"> • Origin of planning in England • Early contributors to planning • Garden City Movement • Master Plan Concept • Neighbourhood Design • etc 	The origin of planning thoughts; the contributions of philanthropists and the various planning principles are to be understood by students.
7	New Towns	Understanding the planning and creation of new towns
8	<p>Issues on the environment</p> <ul style="list-style-type: none"> • Environmental management • Control of development • Maintenance and importance of the environment 	The need to understanding issues of the environment such as management, control, and maintenance are worth noting by the students.
9	<p>Advancement in science and technology</p> <ul style="list-style-type: none"> • What is technology • Difference between Science and Technology 	Students are expected to understand how science has influenced technology and the aim of technology.

10	<p>Merits of advancement in science and technology in the areas of:</p> <ul style="list-style-type: none"> • Information technology • Medicine • Entertainment • Sports and crime detection • Public health and hygiene • Computing • Transportation • Material Engineering • Agriculture • Robotics 	All the various areas of the merits of advancement in science and technology will be understood by the students
11	<p>Demerits of advancement in science and technology as it affects:</p> <ul style="list-style-type: none"> • Pollution • Nuclear/chemical damage • Ethical issues • Transportation- accidents • Information technology- radiation Cyber crime • Medicine - radiation <ul style="list-style-type: none"> ✓ Side effects of drugs ✓ Overdose • Agriculture-chemical poisoning • Public health and hygiene 	The demerits of advancement in science and technology will be understood by the students
12	The Concept of Sustainable development	Students are expected to understand the background thought to sustainable development and means of achieving sustainable development.