



THE FEDERAL UNIVERSITY OF TECHNOLOGY, AKURE

Department of Forestry and Wood Technology

FWT 514 –FOREST RESERVES AND PARKS (2 UNITS)

COURSE PARTICULARS

Course Code: FWT 514

Course Title: FOREST RESERVES AND PARKS

No. of Units: 2

Course Duration: One hour of theory and three hours of practical per week for 15 weeks.

Status: Compulsory

Course Email Address: adekunlevaj@rediffmail.com

Course Webpage: <http://www.fwt.futa.edu.ng/courseschedule.php?coursecode=FWT%20514>

Prerequisite: NIL

COURSE INSTRUCTORS

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COURSE DESCRIPTION

In situ management of forest resources is very important for sustainability. This course has to do with the various in situ methods of biodiversity conservation and approaches to forest resources management before independence and after. The course is therefore designed to educate students on the various phases involved in forest reservation in Nigeria dated back to the Colonia era and today. During this course, students are introduced to the various in situ conservation methods including the traditional and the organised ones and the management of forest reserves and parks for sustainability. Some of the topics to be covered will include the definition of forest reserve. History of forest reservation in Nigeria. Aims and objectives of forest reservation, methods of forest reservation. Problems of forest reservation. Concepts, principles and policies influencing the development of forest reserves with special reference to Nigeria. Biodiversity Assessment of forest reserves. Logging procedure in forest reserves and free areas. Establishment, management and working plan for forest reserves, plantations and parks. Development of National parks in Nigeria. Remote sensing and National parks management.

COURSE OBJECTIVES

The objectives of this course are to:

- introduce students to the use the different phases of forest reservation in Nigeria from the Colonia era;
- provide students with opportunities to develop their skills in the management of forest resources for sustainability.
- train students on park management and development
- enable students to know how to assess carry out biodiversity assessment in natural forest ecosystem.

COURSE LEARNING OUTCOMES / COMPETENCIES

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

(Knowledge based)

- use of biodiversity indices for biodiversity assessment, estimate abundance and diversity of species in the natural forest ecosystem;
- history, reasons and problems for forest reservation in Nigeria
- history, location, features, purpose and functions of Nigerian National Parks
- establishment, management and the development of working plan for forest reserves, plantations and parks

(Skills)

- use the some biodiversity indices to carry out quantitative assessment of natural forests
- formulate working plan for natural forest
- carry out the management of national parks, wildlife sanctuaries and game reserves
- capable of managing the forest estate for continuous production.
- supervision of logging in forest reserves, free areas and plantation following the appropriate procedures

GRADING SYSTEM FOR THE COURSE

This course will be graded as follows:

Class Attendance	10%
Assignments	30%
<u>Final Examination</u>	<u>60%</u>
<u>TOTAL</u>	<u>100%</u>

GENERAL INSTRUCTIONS

Attendance: It is expected that every student are in class for lectures and also participate in all practical exercises. 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 send his/her notification of absence in writing or sms as soon as possible to the instructor, 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 and all the students involved will score zero in that particular work.

Assignments and Group Work: Students are expected to submit assignments as scheduled. Failure to submit an assignment as at when due will earn you zero for that assignment. Only under justifying circumstances, for which a student has notified the instructor (in writing/sms) in advance, will late submission of assignments be permitted.

Code of Conduct in Lecture Rooms: Students should turn off their cell phones during lectures. Students are prohibited from engaging in other activities (such as texting, watching videos, etc.) during lectures. Food and drinks are not permitted in the laboratories.

READING LIST

- 1 Holdgate, M. 1999. *The Green Web: A Union for World Conservation*. IUCN, Earthscan, London.
2. Isichei, A.O. (1995). Omo biosphere reserve, current status, utilisation of biological resources and sustainable management (Nigeria). UNESCO South-South cooperation programme working paper No. 11, 48pp
3. Kent, M. & Coker, P., (1992). *Vegetation description and analysis: a practical approach*. Belhaven press London, 363pp.
4. Magurran, A. E. 2004. *Measuring Biological Diversity*. Blackwell, Oxford. UK. 256p.

Note:

These texts are available in the University Library, Departmental/School Libraries and in local bookshops. Additional materials can be obtained on the internet.

COURSE OUTLINE

Week	Topic	Remarks
1	<ul style="list-style-type: none"> - Definition of forest reserve. - Criteria for forest reservation - History of forest reservation in Nigeria during the Colonia era and pre-Colonia era. - Phases of forest reservation in Nigeria (1) the reservation phase between 1899 and 1930 (2) the exploitation phase between 1930 and 1960 and (3) the development phase from 1960 onwards. 	During this first class, the history of forest reservation in Nigeria will be studied. This shall be traced from the pre Colonia era, reservation period by the first British forest officer to Nigeria and forest management after independence and onward.
2 & 3	<ul style="list-style-type: none"> - Problems of forest reservation in Nigeria - Mitigation of the problems of forest reservation and sustainable management of forest resources - The numerous factors supporting reservation in developing countries 	The problems of reservation will be looked into. Suggested solutions to these problems will be explained and the students are expected to understand the various means adopted for forest reservation and the means of sustainable forest resources management.
4 & 5	<ul style="list-style-type: none"> - Concept of in-situ management of renewable natural resources - The sacred groves and venerated tree species and forests. - Efficiency of forest conservation with taboos and local laws - Forest reserves, permanent sample plots, strict nature reserves, biosphere reserves, wildlife sanctuaries, national parks and game reserves. - Regeneration methods in natural forests such as the tropical shelter-wood system (TSS), enrichment planting and taungya system - The socio-magical and religious concept of forests as they affect conservation 	<p>The student will be introduced to the various methods of in-situ conservation. They will also be made to understand the major differences between in-situ and en-situ methods of biodiversity conservation. The principal features of each will be learnt, the number available in the country and their locations and management should be understood by every student.</p> <p>The ability of the students to identify these methods will be tested. There will be visit to some of the conservations</p>
6	<p>The Protected Areas (PAs) and biodiversity hotspots</p> <ul style="list-style-type: none"> - Definition of Protected areas - IUCN (1994) categorized of PAs by primary management objectives: <ul style="list-style-type: none"> - Category 1a - Strict Nature Reserve: protected area managed mainly for science - Category 1b - Wilderness Area: protected area managed mainly for wilderness protection - Category II - National Park: protected area managed mainly for ecosystem protection and recreation - Category III - Natural Monument: protected area managed mainly for conservation of specific natural features - Category IV - Habitat/Species Management Area: protected area managed mainly for conservation through management intervention - Category V - Protected Landscape/Seascape: protected area managed mainly for 	At the end of this week, every student is expected to have understood the criteria for classifying PAs into the various categories and the multiple roles of PAs i.e. the ecological, environmental, social, economical, aesthetic, recreational etc roles of PAs.

	<p>landscape/seascape conservation and recreation</p> <ul style="list-style-type: none"> - Category VI - Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems. - The productive and environmental roles of PAs. 	
7 & 8	<p>Biodiversity assessment methods for forest reserves</p> <ul style="list-style-type: none"> - Biodiversity indices (alpha & Beta indices) - The use of indices to compare forest communities - Abundance and diversity of species (flora and fauna, - micro, meso and macro) in natural forest ecosystem - Endanger species in Nigeria forest 	<p>The various methods for assessing and estimating tree species abundance and diversity will be explained. Students should be able to conduct simple field data collection on forest species diversity and obtain their indices</p>
9 & 10	<p>Concepts, principles and policies influencing the development of forest reserves with special reference to Nigeria.</p> <ul style="list-style-type: none"> - Community or joint forest management - Logging procedure and logging methods in forest reserves and free areas. - Forest laws on forest protection and log release in forest reserves and free areas 	<p>Students will be taught the concept of policy of forest reservation. At the end of this class, every student should be able to understand the procedure for log removal in the forest reserves and the tree areas in Nigeria</p>
11 & 12	<p>Establishment, management and working plan for forest reserves, plantations and parks.</p> <ul style="list-style-type: none"> - Development of National parks in Nigeria. - List of national parks, features, geographical locations and management - Description of other wildlife conservation measures namely wildlife sanctuaries, game reserves etc, locations, ownerships and management 	<p>Every student is expected to develop a management plan for a named forest reserve. At the end of these lectures, students should be able to clearly distinguish among these wildlife conservation practices.</p>
13 & 14	<p>Remote sensing and National parks management</p> <ul style="list-style-type: none"> - Problems of national park management in Nigeria - 	<p>There will be visit to some of the National parks and reserves</p>
15	<p>REVISION</p>	<p>This is the week preceding the final examination. At this time, evaluation will be done to assess how far the students' expectations for the course have been met.</p>