



THE FEDERAL UNIVERSITY OF TECHNOLOGY, AKURE

Department of Crop, Soil and Pest Management

CSP 503 – Agronomy of Tree Crops

COURSE PARTICULARS

Course Code: CSP 503

Course Title: Agronomy of Tree crops.

No. of Units: 3

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

Status: Compulsory

Course Email Address:

Course Webpage:

Prerequisite: NIL

COURSE INSTRUCTORS

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COURSE DESCRIPTION

Origin, distribution, botany, taxonomy, ecology and methods of cultivation of the major tree and fruit crops – cocoa cola, coffee, latex producing plants, cashew, oil palm, coconut, mango, tea, citrus, pawpaw, pineapples. The cultivations, processing, preservations, marketing and utilization of each of the afore-mentioned crops.

COURSE OBJECTIVES

The objectives of this course are to:

- introduce students to the ecology of tree crops of West Africa; and
- provide students with production practices available for each of the economic tree and fruit crops of West Africa.

COURSE LEARNING OUTCOMES / COMPETENCIES

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

(Knowledge based)

- Understand and appreciate the role of the economic tree and fruit crops in nation building;
- Understand basic crop husbandry practices, production, and various methods of processing, storage and marketing and utilization of various products and by-products obtainable from the tree and fruit crops of West Africa.

(Skills)

- use the basic farm techniques to:
 - establish nurseries for those crops that are difficult to raise from seeds;
 - develop interest in the establishment of plantation crops as a means of generating income.

GRADING SYSTEM FOR THE COURSE

This course will be graded as follows:

Practical and Attendance	40%
<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. 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 and Group Work: Students are expected to show evidences of participation in the practical and assignments as scheduled. Inability or failure by any student to submit/show an assignment/practical work as at when due will earn the affected students zero. Only under

extenuating circumstances, for which a student has notified any of the instructors in advance, will late submission of assignments and practical be permitted.

Code of Conduct in Lecture Rooms and Laboratories: 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

¹Botany for degree students by A.C Dutta.

²Tropical crops: A textbook of economic botany S.L. Kochhar

³Tropical tree crops by L.C Opeke.

Legend

1- Available in the University Library

2- Available on the Internet.

3- Available as Personal Collection

4- Available in local bookshops.

COURSE OUTLINE

Week	Topic	Remarks
1	Introduction and Course Overview	During this first class, the expectation of the students from the course will also be documented.
2 & 3	<ul style="list-style-type: none"> • Ecology of Tree Crops of West Africa • The nursery: importance, types preparation/establishment and management of nursery • Propagation methods and • Field establishment 	Practical exercise will involve showing the students various horticultural and field equipments of importance.
4 & 5	History, taxonomy, botany, agronomy, diseases and control, pest and their control, harvesting, processing storage and utilization of Cacao and Kolanuts.	<p>When learning about cacao and kolanuts, students will be taught on the nursery establishment of these crops.</p> <p>Practical: Securing and purchase of seeds from CRIN, Ibadan. Filling of pots with top soils and arrangement of the pots and lastly watering and planting of seeds.</p>
6	History, taxonomy, botany, agronomy, diseases and control, pest and their control, harvesting, processing storage and utilization of mango and citrus fruits	<p>When learning about mango and citrus fruits, students will be taught on the nursery establishment of these crops.</p> <p>Practical: Securing and purchase of seeds/rootstocks materials from ADP and or NIHORT, Ibadan. Establishment of pre-nursery, filling of pots with top soils and arrangement of the pots and lastly watering and planting of seeds.</p>
7 & 8	History, taxonomy, botany, agronomy, diseases and control, pest and their control, harvesting, processing storage and utilization of oil palm and coconuts,	<p>When learning about oil palm and coconuts, students will be taught on the nursery establishment of these crops.</p> <p>Practical: Securing and purchase of seeds/sprouted nuts from NIFOR, Benin (EdoState), filling of pots with top soils and arrangement of the pots and lastly watering and planting of seeds/sprouted nuts.</p>
9 & 10	History, taxonomy, botany, agronomy, diseases	When learning about latex producing

<p>and control, pest and their control, harvesting, processing storage and utilization of latex producing plants</p>	<p>plants, students will be taught on the nursery establishment of these crops.</p> <p>Practical: Securing and purchase of seeds from Rubber Research Institute, filling of pots with top soils and arrangement of the pots and lastly watering and planting of seeds.</p>
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11&12	History, taxonomy, botany, agronomy, diseases and control, pest and their control, harvesting, processing storage and utilization of cashew and pawpaw,	<p>When learning about cashew and pawpaw, students will be taught on the methods of extraction of products and by-products these crops.</p> <p>Practical: Securing and purchase of seeds from reliable source, filling of pots with top soils and arrangement of the pots and lastly watering and planting of seeds.</p>
13 & 14	History, taxonomy, botany, agronomy, diseases and control, pest and their control, harvesting, processing storage and utilization of under exploited crops of West Africa.	<p>When learning about under exploited crops, students will be taught on the relevance nursery establishment of these crops.</p> <p>Practical: Demonstrate to students how to rapidly multiply planting materials.</p>
15	REVISION	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.