

COURSE COMPACT FOR MCB 413 (FOOD MICROBIOLOGY)/3 UNITS

Dr. A.O. Oyebanji

Course Title:

- Food Microbiology

Brief Overview

- Lecture would show what Food Microbiology is about and teach Microbiology for its application in Food and Associated Value Chain Concerns.
- Microbiological techniques analysis and investigations, standard, certification for quality control, assurance and safety of Food for man and livestock would be taught
- Discussions will show Food Microbiology in product development, value addition, loss reduction, food security, health, trade, sustainability and increase of agricultural production and job creation

Course Objectives

- Course Objectives / Goal
- To indicate the wide prospects from the study of Food Microbiology
- To impart knowledge and skills for the practices Food Microbiologists

Method of Lecture Delivery / Teaching Aid

- PowerPoint Presentation of Lecture in an interactive manner to engage the interest of students to ensure understanding of Food Microbiology and Techniques of practice.
- Practical would be conducted to demonstrate Techniques of Laboratory and Field Analysis of Food and Related samples in a participatory manner.
- Students / groups would be challenged in discussions and assignments to resolve problems of Food Quality, Standard and Safety as would a Food Microbiologist in Practice

Grading & Ground Rules

- Continuous Assessment (30% of Total marks obtainable)
- Examination (70% of Total marks obtainable)
- Class attendance must be up to 75% to participate in Semester Examination
- Lateness to class would attract disciplinary action
- Compliance to University Dress code and requirements for laboratory practice to avoid disciplinary action
- Students are required to upgrade knowledge gained in class through extra reading for better examination performance

Course Outline

- **Module 1:** Introduction to Food Microbiology and Practice
- **Module 2:** Fundamentals Microbiology and Laboratory Microbiological Analytical Techniques
- **Module 3:** Factors influencing Incidence, Growth and Activities of Microorganisms along Food Value Chain
- **Module 4:** Fermentation and Fermented Food Products: Gari, Fufu, Yogourt, etc.
- **Module 5:** Pathogenic and Spoilage Microorganisms in Classes of Foods and Products
- **Module 6:** Mechanism and Implications of Contamination, growth and activities of Pathogenic, Spoilage and beneficial Food Microorganisms
- **Module 7:** Principles and practices for Food Quality and Safety with reference to Microbiological Food Quality Control and Assurance
- **Module 8:** Mycotoxins and Enzymes

Alignment with Goals and Vision of Landmark University

- The course contents by relevance to sustainability and increase of agricultural production
- Grading Plans, ground rules and regulations connect the core values of responsibility, mentality, capacity building, diligence and possibility

End of Class

- Good afternoon