THOMAS ADEWUMI UNIVERSITY OKO COURSE OUTLINE		
Faculty	Computing and applied science	
Department	Biological Sciences	
Course title	**FOOD SANITATION AND CONTROL**	
Year of study	3	
Course code	MCB 308	
Credit hours	2	
Contact hours	30	
Mode of delivery	CLASSROOM LECTURES	
Mode of assessment		WEIGHT%
Continuous assessment		30%
Final examination		70%
Total		100%
Course lecturers and Instructors	MRS F.J. OLAITAN-LECTURER	
Course description	"Food Sanitation and Control" is a comprehensive course that delves into the critical aspects of ensuring the safety and quality of food products from production to consumption. Through a combination of theoretical knowledge, practical techniques, and real-world applications, students will explore the principles of Hazard Analysis and Critical Control Point (HACCP) systems, methods for detecting foodborne pathogens, and the use of sanitizers to maintain food sanitary quality. Additionally, the course introduces predictive microbiology to forecast microbial behavior in food products.	
Course objectives	This course will facilitate the understanding of: 1. Understand the significance of food sanitation and its impact on public health. 2. Implement Hazard Analysis and Critical Control Point (HACCP) systems for food safety. 3. Evaluate the quality of food products using indices of food sanitary quality. 4. Demonstrate knowledge of sanitizers and their role in maintaining food hygiene. 5. Apply cultural and rapid detection methods to identify foodborne pathogens.	

	6. Comprehend the basics of predictive microbiology for assessing food safety.
Learning outcomes	By the end of the course, students will be able to: 1. explain the significance of food sanitation and its impact on public health. 2. describe seven principles of HACCP systems for food safety. 3. use the indices of food sanitary quality to analyze the quality of food products 4. describe the specific use of sanitizers in ensuring food hygiene. 5. describe the cultural and rapid detection methods to identify at least five foodborne pathogens. 6. apply the fundamentals of predictive microbiology to assess food safety
Teaching and learning	The class will be taught for two hours a week.
Detailed course content	Introduction to Food Sanitation and Control: Importance and Objectives Hazard Analysis and Critical Control Point (HACCP) Principles and Implementation Indices of Food Sanitary Quality: Measuring Microbial Contamination Sanitizers: Types, Modes of Action, and Applications in Food Industry Cultural Detection Methods: Isolation and Identification of Foodborne Pathogens Rapid Detection Methods: Molecular Techniques, Immunoassays, and Biosensors Predictive Microbiology: Principles of Microbial Growth and Behavior Prediction Emerging Trends in Food Safety and Sanitation
Course content sequencing	
Weeks	
Week 1	Introduction to Food Sanitation and Control: Importance and Objectives
Week 2	Hazard Analysis and Critical Control Point (HACCP) Principles and Implementation

Week 3 & 4	Indices of Food Sanitary Quality: Measuring Microbial Contamination
Week 5 & 6	Sanitizers: Types, Modes of Action, and Applications in Food Industry
Week 7 & 8	Cultural Detection Methods: Isolation and Identification of Foodborne Pathogens
Week 9	Rapid Detection Methods: Molecular Techniques, Immunoassays, and Biosensors
Week 10	Predictive Microbiology: Principles of Microbial Growth and Behavior Prediction
Week 11	Emerging Trends in Food Safety and Sanitation
Week 12	Revision
Recommended reading material	

1. Joanne Willey and Kathleen Sandman and Dorothy Wood (2020). Prescott's Microbiology. 11th Edition.
2. Microorganisms in Foods (2018). Microbiological Testing in Food Safety Management. International Commission on Microbiological Specifications for Foods (ICMSF) Second Edition. https://doi.org/10.1007/978-3-319-68460-4
3. Norman G. Marriott and Robert B. Gravani (2006). Principles of Food Sanitation Fifth Edition, Springer books.

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Preamble: "Food Sanitation and Control" is a comprehensive course that delves into the critical aspects of ensuring the safety and quality of food products from production to consumption. Through a combination of theoretical knowledge, practical techniques, and real-world applications, students will explore the principles of Hazard Analysis and Critical Control Point (HACCP) systems, methods for detecting foodborne pathogens, and the use of sanitizers to maintain food sanitary quality. Additionally, the course introduces predictive microbiology to forecast microbial behavior in food products.

A. Specific course objectives/learning outcomes.

The course will enable the understanding of the following:

1. Understand the significance of food sanitation and its impact on public health.
2. Implement Hazard Analysis and Critical Control Point (HACCP) systems for food safety.
3. Evaluate the quality of food products using indices of food sanitary quality.
4. Demonstrate knowledge of sanitizers and their role in maintaining food hygiene.
5. Apply cultural and rapid detection methods to identify foodborne pathogens.

6. Comprehend the basics of predictive microbiology for assessing food safety.

B. Learning activities/Course delivery methods

C. Lectures: detailed content of course are taught in class

Course content: Introduction to Food Sanitation and Control: Importance and Objectives. Hazard Analysis and Critical Control Point (HACCP) Principles and Implementation. Indices of Food Sanitary Quality: Measuring Microbial Contamination. Sanitizers: Types, Modes of Action, and Applications in Food Industry. Cultural Detection Methods: Isolation and Identification of Foodborne Pathogens. Rapid Detection Methods: Molecular Techniques, Immunoassays, and Biosensors. Predictive Microbiology: Principles of Microbial Growth and Behavior Prediction. Emerging Trends in Food Safety and Sanitation.