Macao Polytechnic Institute

School of Health Sciences and Sports

Bachelor of Science in Biomedical Technology

(Medical Laboratory Technology and Pharmacy Technology)

Module Outline

Academic Year 2021 / 2022 Semester 1

Learning Module	Food Safety			Class Code	BSPE2101	
Pre-requisite(s)	Nil					
Medium of Instruction	Cantonese & English			Credit	2	
Lecture Hours	30 hrs	Lab/Practice Hours	0 hrs	Total Hours	30 hrs	
Instructor	Mr. Vong Wai Ting		E-mail	t0888@ipm.edu.mo		
Office			Telephone			

Description

This learning module is taught by Mr. W. T. Vong.

This learning module is designed to introduce some basic knowledge about food safety, including: the challenges of food safety, the flow of food process and operation, food safety management systems, facilities and pest management, food safety regulations and employee training.

Learning Outcomes

After completing the learning module, students will be able to:

- 1. Familiar with the basic theory of food safety;
- 2. Understand the requirement of operation for food safety.

Content

Theory

Food Safety (28 class hours)

- 1. Keeping Food Safe (1 class hour)
- Foodborne Illnesses
- How Foodborne Illnesses Occur
- The Food Safety Responsibilities of a Manager
- 2. Understanding the Microworld (3 class hours)
- Pathogens
- Bacteria
- Viruses
- Parasites
- Fungi
- Biological Toxins
- 3. Contamination, Food Allergens, and Foodborne Illness (2 class hours)
- Physical and Chemical Contaminants
- The Deliberate Contamination of Food
- Food Allergens
- 4. The Safe Food Handler (2 class hours)
- Personal Hygiene and Contamination
- A Good Personal Hygiene Program
- 5. The Flow of Food: An Introduction (2 class hours)
- Cross-Contamination
- Time-Temperature Control
- 6. The Flow of Food: Purchasing and Receiving (1 class hour)
- Purchasing Considerations
- Receiving Considerations
- General Inspection Guidelines
- Inspecting Specific Types of Food
- 7. The Flow of Food: Storage (1 class hour)
- General Storage Guidelines
- Storing Specific Food

- 8. The Flow of Food: Preparation (2 class hours)
- Preparation
- Cooking Food
- Cooling and Reheating Food
- 9. The Flow of Food: Service (1 class hour)
- Holding Food for Service
- Serving Food Safely
- Off-Site Service
- 10. Food Safety Management Systems (2 class hours)
- Food Safety Management Systems
- Active Managerial Control
- Crisis Management
- 11. Safe Facilities and Management (3 class hours)
- Designing a Safe Operation
- Considerations for Other Areas of the Facility
- Equipment Selection
- Installing and Maintaining Kitchen Equipment
- Utilities
- 12. Cleaning and Sanitizing (3 class hours)
- Cleaning
- Sanitizing
- Dishwashing
- Cleaning the Premises
- Developing a Cleaning Program
- 13. Integrated Pest Management (1 class hour)
- Integrated Pest Management (IPM) Systems
- Identifying Pests
- Working with a Pest Control Operator (PCO)
- Treatment
- Using and Storing Pesticides
- 14. Food Safety Regulation and Standards (1 class hour)
- Government Agencies Responsible for Preventing Foodborne Illness
- The Inspection Process
- Self-Inspections

- Voluntary Controls within the Industry
- 15. Staff Food Safety Training (1 class hour)
- Training Staff
- Ways of Training
- 16. Mid-term Test (2 class hours)
- 17. Final Examination (2 class hours)

Teaching Method

Lectures

Attendance

Attendance requirements are governed by the "Academic Regulations Governing Bachelor's Degree Programmes of Macao Polytechnic Institute". Students are not eligible to attend the final examination and re-sit examination if the absence rate exceeds 30%. Moreover, an "F" will be given as the final grade to students who have less than the stated attendance for this enrolled learning module.

Assessment

☐ Examination 100%

The examination & test are graded according to the percentage, with 100 being the full score and 50 the passing score. To enter the re-sit examination, the score of final examination must be over 35 percent. Students with a score of less than 35 in the final examination must take the re-sit examination even if the overall score for the learning module is 50 or above.

Item	Description	Percentage	Duet Date
		100%	
1. Test		50%	
2. Examination		50%	

Teaching Material(s)

Text book and reference books, Power point notes ... etc.

Reference

Reference book(s)

- 1. Servsafe Coursebook, 7th edition, updated with the 2017 FDA Food Code, National Restaurant Association, ISBN 978-0-13476-423-8
- 2. 李昇平 (2019)。食品衛生與安全。台灣: 高點出版社。ISBN 9789578147522