Course syllabus

1. Course number	2314255 (SEC 51)
2. Course credit	3 credits
3. Course title	Elementary Food Technology
4. Department/Faculty	Department of Food Technology/Faculty of Science
5. Semester	First
6. Year	2024
7. Instructor	Associate Professor Dr. Kanitha Tananuwong Assistant Professor Dr. Varapha Kongpensook Assistant Professor Dr. Panita Ngamchuachit Associate Professor Dr. Kitipong Assatarakul (coordinator) (email : Kitipong.A@chula.ac.th)
8. Conditions	-
9. Course status	Selective
10. Course of study	General education project
11. Course level	undergraduate
12. Lecture hour/week	3 hours/week; Thursday (9.00-12.00 hrs)
13. Course description	Principle of food preservation and processing, Food chemistry and Microbiology of Food and Basic food safety

14 Course outline

14.1 Objectives

- to understand definitions and processing in food processing
- to understand the factors influencing the spoilage of foods and basic principle of food preservation
- to be able to imply the learned knowledge in everyday life.

14.2 Content

Date	Topics	Instructor
8 Aug 2024	Course overview and Introduction of Food Technology	Dr. Kitipong
15 Aug 2024	Food and Nutrition	Dr. Kitipong
22 Aug 2024	Deterioration of Food by Microorganism	Dr. Kitipong
29 Aug 2024	Deterioration of Food by Chemical and Physical reaction	Dr. Kitipong

5 Sep 2024	Unit Operation	Dr. Panita
12 Sep 2024	Food Preservation; Chemicals	Dr. Kanitha
19 Sep 2024	Food Preservation; Drying and concentration	Dr. Panita
	Midterm examination (23 – 27 Sep 2024)	
3 Oct 2024	Food Preservation; Low/High temperature	Dr. Kitipong
10 Oct 2024	Food Preservation; Fermentation	Dr. Kitipong
17 Oct 2024	Quality of Food; Measurement	Dr. Panita
24 Oct 2024	Product Development	Dr. Kanitha
31 Oct 2024	Introduction to Sensory analysis	Dr. Varapha
7 Nov 2024	Food Packaging/Labeling	Dr. Kitipong
14 Nov 2024	Risk, Hazard and Food Safety	Dr. Kitipong
21 Nov 2024	Food Sanitation and Food Service	Dr. Kitipong
	Final Examination (25 Nov – 9 Dec 2024)	

14.3 Teaching Methods — Tentative: Room MCS 303 (Maha Chakri Sirindhorn Building)

14.4 Teaching media — slides, video, handouts and E-learning platform

14.5 Learning evaluation

Mid-term exam	40%
Final exam	40%
Quiz/Class attendance	10%
Report/presentation	10%
Total	**100%**

15. References;

15.1 Gaman, P,M. and Sherrington, K.B. 1990. The Science of Food 3rd Pergamon Press. Oxford, England

15.2 Potter, N.N. and Hotchkiss, J.H. 1998. Food Science 5th ed. An Aspen Publication.

16. Grading

Score	Grade
≥80	A
75.00-79.99	B+
70.00-74.99	B
65.00-69.99	C+
60.00-64.99	C
55.00-59.99	D+
50.00-54.99	D
<50	F