Course Syllabus (Academic Year 2021)

Food Technology Program, Kanchanaburi Campus, Mahidol University

1. **Course No. and Title** : KAFT 353 Food Safety and Sanitation
   Credit (study hours) : 3 (3-0-6)
2. **Program Name** : Bachelor of Science in Food Technology
3. **Course Module** : Specialized/Specific core
   Pre-requisite : KAFT 237
4. **Class Semester** : ☑ 1st Semester ☐ 2nd Semester Academic Year 2021
5. **Class Schedule & Venue** : Every Friday 9:00-12:00 Online via WebEx
6. **Class Coordinator** : Jarupat Luecha, Ph.D.
   Email : jarupat.lue@mahidol.edu
7. **Course Description**

   Basic knowledge of food safety, regulations and requirements for food safety; effects of food processing on food safety; hygiene in food production in food factory, safety and sanitation control in the food production processes and in food products; good manufacturing practices (GMP), hazard analysis and critical control point (HACCP), risk assessment of different food types; critical thinking

8. **Course Objectives / Course Learning Outcomes (CLOs)**

No.	Objectives / CLOs	Expected Skills / Knowledge			PLOs
		Specific	Generic	Knowledge	
8.1	Explain principle of good hygiene and safety in food processing and apply food technology knowledge in food hygiene systems.	S2: Skill in controlling food production process	G1: Decision making G3: Ethics G4: Associating skill	K2: Food chemistry K3: Food processing K6: Food engineering K8: Food microbiology	1
8.2	Explain and discuss the impacts or influences of food processing	S8: Skill in judging food quality based on provided data	G4: Associating skill Critical thinking skill	K2: Food chemistry K3: Food processing	1,4,5

	techniques, food additives, and microorganisms on food safety from scientific viewpoint			K6: Food engineering K8: Food microbiology	
8.3	Explain and discuss risk assessment systems used in some food production.	S8: Skill in judging food quality based on provided data	G4: Associating skill G5: Business awareness	K2: Food chemistry K3: Food processing K6: Food engineering K8: Food microbiology K11: Logistic K14: Global& national trend & policy	1,4,5

9. Class Instructor List

9.1 Ronnachai Yoddumnern (RY) Email : ronnachai_y@hotmail.com
อ.รณชัย ยอดดำเนิน

9.2 Assistant Professor Plaimein Amnuaycheewa (PA) Email : plaimein.a@sci.kmutnb.ac.th
ผ.ศ. ดร.ปลายมีน อำนวยชีวะ*

9.4 Jarupat Luecha, Ph.D. (JL) Email : jarupat.lue@mahidol.edu
อ.ดร.จารุภัทร ลือชา

* Invited speaker

10. Course Outline

Week	Date	Contents	CLOs	Teaching & Learning	Instructor
1	13 Aug 2021	Food safety: Concept, Definition and Elements of food safety management	8.1	Online lecturing and assignment and case studies	RY
2	20 Aug 2021	Consumer awareness, Ethics of food producer	8.1		RY
3	27 Aug 2021	Hygienic practice in primary production	8.1		RY
4	3 Sep 2021	Hygienic practice in food processing	8.1-8.2		RY
5	10 Sep 2021	Plant layout and design	8.1-8.2		RY

Week	Date	Contents	CLOs	Teaching & Learning	Instructor
6	17 Sep 2021	Principle and system in food safety management (GMP, HACCP)	8.1, 8.3		RY
7	24 Sep 2021* Holiday Mahidol Day	Human factors and Personal hygiene	8.1-8.2		RY
8	1 Oct 2021	Thermal and non-thermal treatment in food safety	8.1-8.2		JL
9	8 Oct 2021	Management of chemical hazards	8.2-8.3		JL
10	Mid-term Examination (11-15 Oct 2021 At Kanchanaburi Campus)				
11	22 Oct 2021	Management of microbiological hazards	8.2-8.3	Online lecturing and assignment and case studies	RY
12	29 Oct 2021	Management of food allergen 1	8.2-8.3		PA
13	5 Nov 2021	Management of food allergen 2	8.2-8.3		PA
14	12 Nov 2021	Incident and crisis management	8.2-8.3		RY
15	19 Nov 2021	Presentation I Food safety management in Milk and Dairy products	8.2-8.3	Online presentation and discussion/ report submission	All staffs
16	26 Nov 2021	Presentation II Food safety management in meat products	8.2-8.3	Online presentation and discussion/ report submission	All Staffs
17	Final Examination (29 Nov- 9 Dec 2021)				
18					

***TBA= To be announced**

11. Course Assessment

No.	Methods / Activities	Regulations	CLOs	Week	Weight Distribution (%)
11.1	Midterm Examination	Open-book examination	8.1-8.3	1-7	38.5
11.2	Final Examination	Open-book examination	8.1-8.3	8-9, 11-14	33
11.3	Term project	Assessed using rubric	8.1-8.3	15-16	20
11.4	Class participation	Instructor evaluation of class participation		1-16	8.5
				Total	**100**

12. Grading System

☑ Criterion-referenced evaluation

Class' average score < 75.00 %		Class' average score ≥ 75.00%	
Grade	Score	Grade	Score
A	≥ 80.00 %	A	≥ 85.00 %
B+	75.00 – 79.99%	B+	80.00 – 84.99%
B	70.00 – 74.99%	B	75.00 – 79.99%
C+	65.00 – 69.99%	C+	70.00 – 74.99%
C	60.00 – 64.99%	C	65.00 – 69.99%
D+	55.00 – 59.99%	D+	60.00 – 64.99%
D	50.00 – 54.99%	D	55.00 – 59.99%
F	< 50.00 %	F	< 55.00 %

☑ Norm-referenced evaluation

13. References

Yasmine Motarjemi and Huub Lelieveld. Food safety management: A practical guide for the food industry. Acade,oc Press. Waltham, MA. 2014.

Paul L Knechtges. Food Safety: Theory and Practice. Jones & Bartlett Learning: Burlington, Mass, 2011.