

Course Syllabus

1. Name of Curriculum

Bachelor of Science (Food Science & Technology), Mahidol University International College

2. **Course Code:** ICFS 421 **Course Title:** Food and Nutrition

3. **Number of Credits:** 4 (Lecture/Lab) (4-0)

4. **Prerequisite(s):** ICBI 212

5. **Type of Course:** Required

6. **Trimester / Academic Year:** 3rd trimester / 2003-04

7. Course Description

Elements of human nutrition including vitamins, minerals, micronutrients, and antioxidants including sources, metabolism, and functions in the human body; nutritive values of foods; requirements for human health, nutraceuticals, and functional foods and their effects on human health beyond basic nutrition.

8. Course Objectives

1. Students can explain the roles of nutrients in human body and also know how to choose foods rich in some specific nutrients in order to prevent nutrient deficiencies.
2. The students are able to evaluate dietary intake using food-based dietary guidelines.
3. The students understand how importance of nutrition facts on the food label to individual's health.

9. Course Outline

Week	Topics			Instructor
	Lecture/Seminar	Hour	Lab	
1	Introduction, Energy Carbohydrate	2		Ratchanee
		2		
2	Protein metabolism Protein quality evaluation	2		Prapaisri
		2		
3	Fat Fat soluble vitamins	2		Ratchanee
		2		
4	Water soluble vitamins	4		Ratchanee
5	Macro-minerals	4		Prapaisri
6	Midterm Exam	4		Prapaisri
7	Trace elements Trace elements	2		Ratchanee
		2		Prapaisri
8	Food Composition Data System Food and Nutrition Labeling	2		Prapaisri
		2		
9	Dietary Reference Intake Food Based Dietary Guidelines (FBDG) and FBDG (Practice)/ Assignment	2		Prapaisri
		2		
10	Nutrition Problem in Thailand Chronic Degenerative Diseases	2		Prapaisri
		2		
11	Dietary Supplements Nutrition Labeling (Practice)/ Discussion FBDG assignment Discussion	4		Prapaisri
12	Final examination	4		Prapaisri
	Total	44		

10. Teaching Methods

1. Lecture
2. Practice
3. Exercise after class

11. Teaching Media

1. LCD
2. Slides
3. Handouts

12. Course Achievement

Assessment made from the set-forward criteria: students who get $\geq 85\%$ or \geq mean + 1SD will get grade A. it depends on the size of the class.

13. Course Evaluation

Component	%
Midterm & Final exams	80
Homework/practice and group discussion	10
Exercise at the end of some topics	10
Total	100

14. References

1. Wardlaw GM. Contemporary Nutrition: Issues and Insights. 4th ed. Boston: Mc Graw Hill, 2000.
2. Shils ME, Olson JA, Shike M, Ross AC. Modern Nutrition in Health and Diseases. 9th ed. Philadelphia: Lea & Febiger, 1999.
3. Guthrie HA, Picciano MF. Human Nutrition. New York: Mosby, 1995.

15. Instructor

1. Assoc. Prof. Dr. Prapaisri P Sirichakwal
2. Assoc. Prof. Dr. Ratchanee Kongkachuichai
3. Assoc. Prof. Dr. Prapasri Puwastien

16. Course Coordinator

Assoc. Prof. Dr. Prapaisri P Sirichakwal