Course Syllabus

1. Program of Study Bachelor of Science (Biological Sciences) **Faculty/Institute/Colleg** Mahidol University International College

2. Course Code ICBI 307

Course Title Nutrition and Dietetics

3. Number of Credits 4(4-0-8) (Lecture/Lab/Self-study)

4. Prerequisite (*s*) none

5. Type of Course Elective for 3rd and 4th year Biological Science students

6. Trimester/ Academic Year

2nd trimester/ every academic year

7. Course Condition

Number of student is 20-30.

8 Course Description

Importance of food and nutrients for good health; significance of physiological, biochemical and sociological factors of nutritional requirements; practical application of food and nutrition to diet planning and implementation suited to vulnerable groups and individual therapeutic needs.

9. Course Objective (s)

- 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 understand and can explain nutrient requirements and nutrient recommendations for pregnancy and lactation, infants, children, adolescents, adults and elderly people throughout the life cycle.
- 3. The students can explain nutritional problems in Thailand and are able to identify important clinical manifestations and assess nutritional status in patients with various non-communicable diseases and understand how to plan nutritional care for the patients.

10. Course Outline

week	Topics/Seminar	Hours			
		Lecture	Lab	Self-study	Instructor
1	Introduction, Energy and Protein	4	0	8	Ratchanee
	Carbohydrate and Fat				
2	Water Soluble Vitamins	4	0	8	Ratchanee
	Fat Soluble Vitamins				
3	Minerals	4	0	8	Ratchanee
	RDA/Dietary Guidelines				Vongsvat
4	Nutrition in Pregnancy and	4	0	8	Wantanee
	Lactation				Wantanee
	Nutrition in the Growing Years				

5	Nutrition in Adults and Elderly	4	0	8	Wantanee		
	Nutrition Problem in Thailand				Vongsvat		
6	First examination (50%)	4	0		Rin		
7	Nutritional Assessment	4	0	8	Rin		
	Principle of Diet Therapy				Rin		
8	Diet in Body Weight Control	4	0	8	Wantanee		
	Diet in Diabetes Mellitus				Vongsvat		
9	Diet in Hypertension	4	0	8	Vongsvat		
	Diet in Cardiovascular Disease				Vongsvat		
10	Diet in Cancer	4	0	8	Vongsvat		
	Diet in Osteoporosis				Vongsvat		
11	Diet in Renal Disease	4	0	8	Rin		
	Food Service Management in the				Rin		
	Hospital						
Final examination (50%)							
	Total	44	0	88			

11. Teaching Method (s)

- 1. Lecture
- 2. Suggested readings
- 3. Discussion in class

12. Teaching Media

- 1. Powerpoint Presentations
- 2. Texts and teaching materials

13. Measurement and Evaluation of Student Achievement

Student achievement is measured and evaluated by

- 13.1 The ability to 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.
- 13.2 The ability to explain nutrient requirements and nutrient recommendations for pregnancy and lactation, infants, children, adolescents, adults and elderly people throughout the life cycle.
- 13.3 The ability to explain nutritional problems in Thailand and are able to identify important clinical manifestations and assess nutritional status in patients with various non-communicable diseases and understand how to plan nutritional care for the patients.

Student's achievement will be graded according to the college and university standard using the symbols: A, B+, B, C+, C, D+, D and F. Students must attend at least 80% of the total class hours of this course.

Ration of mark

Midterm exam 50% Final exam 50%

14. Course evaluation

- 14.1 Students' achievement as indicated in number 13 above.
- 14.2 Students' satisfaction towards teaching and learning of the course using questionnaires.

15. Reference (s)

- 1. Mahan, LK and Escott-Stump, S. Krause's food, nutrition & diet therapy. 11th Edition. USA. Elsevier. 2004.
- 2. Wardlaw GM. Contemporary nutrition: issues and insights. 4th Edition. USA. Mc Graw Hill, 2000.
- 3. Zeman, F.J. and Ney, D.M. Applications in medical nutrition therapy. 2nd Edition. USA. Prentice Hall, Inc. 1996.

16. Instructor (s)

Assistant Professor Dr. Vongsvat Kosulwat Assistant Professor Dr. Ratchanee Kongkachuichai Dr. Wantanee Kreingsinyos Ms. Rin Charoensiri

17. Course Coordinator

Associate Professor Dr. Prapaisri P. Sirichakwal Ms. Rin Charoensiri