



## Course Syllabus

### Section 1 General Information

#### 1. Course Code and Title

In Thai ICGN 109 อาหารเพื่อสุขภาพ

In English ICGN 109 Food for Health

#### 2. Number of Credits 4(4-0-8)

(Theory 4 hrs.(2 hours of online teaching and learning), Self-study 8 hrs,  
Practice 0 hrs. / week)

#### 3. Curriculum and Course Type

3.1 Program of Study International Bachelor's Degree

3.2 Course Type General Education

#### 4. Course Coordinator and Instructor

4.1 Course Coordinator Asst. Prof. Dr. Nirutchara Laohaprasit

E mail: [nirutchara.sun@mahidol.edu](mailto:nirutchara.sun@mahidol.edu)

4.2 Instructor Asst. Prof. Dr. Nirutchara Laohaprasit

#### 5. Trimester/Class Level

5.1 Trimester All trimesters (excluding summer session/ for all students in all  
International College Undergraduate Programs)

5.2 Number of Students Allowed Approximately 40 Students

#### 6. Pre-requisite

.....none.....



General Education Course  
Course Title: Food for Health  
Course Code: ICGN 109

Bachelor's Degree Program  
Mahidol University International College  
Science Division

---

**7. Co-requisites**

.....none.....

**8. Study Site Location** MUIC (If applicable)



## Section 2 Aims and Objectives

### 1. Course Goals

Ability to summarize the knowledge of nutrients from food, their role in human body, and their impact on human health together with the knowledge of the cause of spoilage as well as recognizing the principle of some processing techniques for the selection of healthy diets.

### 2. Objectives of Course Development/Revision

#### 2.1 Course Objectives

Recognize food nutrients and their functions that important to human health; determine the amount of energy intake and expenditure of individuals; describe the major reason of food spoilage, and some preservation techniques in food processing, concluding quality and safety of the various types of food.

#### 2.2 Course-level Learning Outcomes (CLOs)

By the end of the course, students are able to

1. CLO1 Recognize main nutrients in food and their functions.
2. CLO2 Ability to approximate the amount of energy intake and expenditure of individuals.
3. CLO3 Understand the knowledge in food choices of individual and other among different food groups.
4. CLO4 Demonstrate ability to work effectively and responsibility for individuals and collaborative work.



## Section 3 Course Description and Implementation

### 1. Course Description

ความรู้ทั่วไปในเรื่องเกี่ยวกับประโยชน์ของอาหารและโภชนาการในมนุษย์ คุณภาพและความปลอดภัยของอาหารที่สืบเนื่องจากกระบวนการผลิตและการถนอมอาหาร รวมถึงวัตถุเจือปนที่นิยมใช้ในกระบวนการผลิตอาหาร ผลกระทบต่อสุขภาพและคุณค่าทางอาหาร

Knowledge of general human nutritional requirements, and the health benefits of various foods, quality and safety of the various types of food including some food additives used in food production and preservation will be discussed insofar as they influence health and nutritional value

### 2. Number of Hours Per Trimester

Theory (hours)	Practice (hours)	Self-study (hours)
48	-	96

### 3. Number of Hours per Week for Individual Advice

Students can visit the lecturer at her office for any questions related to the course content as well as the problems for their individual task.



General Education Course  
Course Title: Food for Health  
Course Code: ICGN 109

Bachelor's Degree Program  
Mahidol University International College  
Science Division

---



#### Section 4: Development of the expected learning outcomes

1. A brief summary of the knowledge or skills expected to develop in students; the course-level expected learning outcomes (CLOs)

By the end of the course, students who successfully complete the course will be able to:

1. CLO1 Recognize main nutrients in food and their functions.
  2. CLO2 Ability to approximate the amount of energy intake and expenditure of individuals.
  3. CLO3 Understand the knowledge in food choices of individual and other among different food groups.
  4. CLO4 Demonstrate ability to work effectively and responsibility for individuals and collaborative work.
2. How to organize learning experiences to develop the knowledge or skills stated in number 1 and how to measure the learning outcomes

Course Code	Teaching and learning experience management	Learning outcome measurements
CLO1	Interactive teaching and learning	Quiz (MCQ)
CLO2	Interactive teaching and learning	Individual report
CLO3	Interactive teaching and learning	Quizzes (MCQ)
CLO4	Interactive teaching and learning	Class Attendance & participation



General Education Course  
Course Title: Food for Health  
Course Code: ICGN 109

Bachelor's Degree Program  
Mahidol University International College  
Science Division

---



### Section 5 Lesson Plan and Evaluation

#### 1. Lesson Plan

Week	Topic/Details	Number of hours		Teaching activities/ media	Instructor
		Live session	Self -study		
1	Introduction and getting to know each other	2	4	Interactive teaching and learning	Nirutchara
1	Introduction	2	4	Interactive teaching and learning	Nirutchara
2	Macronutrients I	4	8	Interactive teaching and learning	Nirutchara
3	Macronutrients II	2	4	Interactive teaching and learning	Nirutchara
3	Macronutrients II	2	4	Interactive teaching and learning	Nirutchara
4	Macronutrients III	4	8	Interactive teaching and learning	Nirutchara
5	Micronutrients I	4	8	Interactive teaching and learning	Nirutchara
6	Micronutrients II	2	4	Interactive teaching and learning	Nirutchara
6	Nutrient requirements in human Food guide	2	4	Interactive teaching and learning	Nirutchara
7	Food group I	4	8	Interactive teaching and learning	Nirutchara
8	Food group II	4	8	Interactive teaching and learning	Nirutchara
9	Food group II +Quiz	4	8	Interactive teaching and learning	Nirutchara
10	Energy balance	4	8	Discussion	Nirutchara
11	Energy balance	4	8	Discussion	Nirutchara
12	Energy balance	4	8	Discussion	Nirutchara
	Total	48	96		

**\*\* Note** the class contents and activities are to be adjusted according to the current situation





## 2. Evaluation of the CLOs

### 2.1 Measurement and Evaluation of learning achievement

#### a. Formative assessment

N/A

#### b. Summative assessment

(1) Tool and weight for measurement and evaluation

Learning Outcomes	Assessment Methods	Assessment Ratio (Percentage)	
CLO1 Recognize main nutrients in food and their functions.	Quizzes – MCQ, matching (75)	40	40
CLO2 Ability to approximate the amount of energy intake and expenditure of individuals	Individual Report	30	30
CLO3 Understand the knowledge in food choices of individual and other among different food groups.	Quiz – MCQ	20	20



CLO4 Demonstrate ability to work effectively and responsibility for individuals and collaborative work.	Attendance & Group discussion	10	10
Total			100

(2) Measurement and evaluation

Grade	Achievement	Final Score (% Range)	GPA
A	Excellent	90-100	4.0
B+	Very good	85-89	3.5
B	Good	80-84	3.0
C+	Fairy good	75-79	2.5
C	Fair	70-74	2.0
D+	Poor	65-69	1.5
D	Very poor	60-64	1.0
F	Fail	Less than 60	0.0

(3) Re-examination (if the course allows any)

N/A

**3. Students' Appeal**

N/A



## Section 6 Teaching Resources

### 1. Required Texts

-

### 2. Suggested Materials

*Bennion, M. & Scheule, B. Introductory Foods 12 th ed. Pearson Education Inc. USA*

*Roday, S. Food Science and Nutrition. 2nd ed. Oxford University press.*

*Croxford, S., Itsiopoulos, C., Forsyth, A. Belski, R. Thodis, A., Shepherd, S., Tierney, A. 2015. Food and Nutrition Throughout Life. Allen & Unwin.*

### 3. Other Resources (if any)

*PowerPoint handout*



## Section 7 Evaluation and Improvement of Course Implementation

### 1. Strategy for Course Effectiveness Evaluation by Students

Student evaluation

### 2. Strategy for Teaching Evaluation

Student evaluation Peer evaluation

### 3. Teaching Improvement

Revision teaching methods based on students' assessment and course evaluation

### 4. Verification of Standard of Learning Outcome for the Course

See section 5 for summative assessment methods

### 5. Revision Process and Improvement Plan for Course Effectiveness

Revision of course to be up-to-date and relevant to the current state of knowledge in this field and improve pedagogy.



General Education Course  
Course Title: Food for Health  
Course Code: ICGN 109

Bachelor's Degree Program  
Mahidol University International College  
Science Division

---