COURSE SYLLABUS

1. Name of Course:

Food Products Development

2. Course Code:

ICFS 371

3. Number of Credits: 4 (Lecture/lab) (4/0)

4. Prerequisites:

ICFS 316, ICSC 303

5. Type of Course:

Elective

6. Semester / Academic Year:

Term 1/2003

7. Course Description:

Principles and steps used in a new product-developing process; formulation, labscale production, quality control, and commercial feasibility study.

8. Course Objectives:

- 1. To understand and gain experience in the process of food product development
- 2. To gain knowledge in food product ingredient technology.
- 3. To be able to prepare a prototype for a new food product.
- 4. To be able to identify challenges involved in he development of a new food product and how to find solutions.
- 5. To understand techniques and knowledge related to the consumer product in development.
- 6. To develop critical thinking skills related to food products.

9. Course Outline

Week	Topics				Instructor
	Lecture/Seminar	Hour	Lab	Hour	
1	Introduction and overview	2			Ms. Valeeratana
					Sinsawasdi
2	Phases in new food product	4			Ms. Valeeratana
	development, product management				Sinsawasdi
	and planning.				
3	Generation of new product ideas,	4			Ms. Valeeratana
	Product concepts, Product design.				Sinsawasdi
4	Ingredients technology –	4			Ms. Valeeratana
	carbohydrates, proteins, fat				Sinsawasdi
5	Ingredients technology –	4			Ms. Valeeratana
	stabilizers, flavors, colorants.				Sinsawasdi
5	Midterm Exam	2			
6	Prototype development	4			Ms. Valeeratana
					Sinsawasdi
7	Sensory evaluation of products	4			Ms. Valeeratana
					Sinsawasdi
8	Process development	4			Ms. Valeeratana
					Sinsawasdi
9	Consumer testing, test market	4			Ms. Valeeratana
	strategy				Sinsawasdi
10	Shelf-life study, integration of	4			Ms. Valeeratana
	R&D specification, manufacturing				Sinsawasdi
11	Product roll-out, presentation	4			Ms. Valeeratana
	of products development.				Sinsawasdi
	Total	44			

10. **Teaching Methods**:

- 1. lectures
- 2. discussion
- 3. journal

11. **Teaching Media**:

- 1. Powerpoint presentation
- 2. handouts
- 3. videos

12. Course Achievement:

Assessemnt made from the set-forward criteria: students who receive 90% and up will receive a Grade A.

13. Course Evaluation:

Mid-term exam	25%
Quizzes	20%
Attendance	10%
Journals	10%
Lab reports	10%
Final exam	25%

14. **References**:

- 1. Earle, M., Earle, R., and Anderson, A. 2001. Food Product Development. CRC Press
- 2. Grap, E., Saguy, and Graf, E. 1991. Food Product Development: From Concept to the Marketplace. Kluwer Academic Publishers

15. Course Coordinator:

Ms. Valeeratana Sinsawasdi