COURSE SYLLABUS

- 1. Name of Course: Principles of Quality Assurance in Food Industry
- 2. Course Code: ICFS 321
- 3. Number of Credits: 4 (Lecture/lab) (4/0)
- 4. **Prerequisites**: ICFS 313, ICFS 316
- 5. **Type of Course**: Required
- 6. Semester / Academic Year: Term 2/2003
- 7. Course Description:

Methods of quality control and management in food processing; total quality control management, HACCP, ISO 9000 and 14,000 series, control of raw materials, process and finished products; sampling, evaluation of sensory properties and other factors.

8. Course Objectives:

After successful completion of this course the student should be able to:

- 1. Understand the principles of management systems directed towards the control of food quality.
- 2. Recognize food laws and regulations governing the quality of foods.
- 3. Develop procedures and approaches to identify food safety hazards in food processing.
- 4. Apply preventive measures and control methods to minimize microbiological hazards and maintain quality of foods.
- 5. Identify the wide variety of parameters affecting food quality.
- 6. Develop quality control strategies.

9. Course Outline

Week			Instructor
	Lecture/Seminar Topics	Hour	
1	Principles and concept of Quality Control	4	Pairoj
	(QC) and Quality Assurance (QA) Part 1		
2	Principles and concept of Quality Control	4	Pairoj
	(QC) and Quality Assurance (QA) Part 2		
3	QA in Food Industry 1	4	Pairoj
4	QA in Food Industry 2	4	Pairoj
5	QC Techniques and Applications: Quality	4	Pairoj
	Activity 5S and Kaizen		
6	QC Techniques and Applications: Quality	4	Pairoj
	Audit		
7	Quality System: HACCP and ISO 9000 in	4	Guest
	Food Industry 1		
8	Quality System: HACCP and ISO 9000 in	4	Guest
	Food Industry 2		
9	Case Study in QA1	4	Pairoj
10	Case Study in QA 2	4	Pairoj
11	Case Study in QA 3	4	Pairoj
	Total	44	

10. Teaching Methods:

- 1. lecture,
- 2. class activities,
- 3. discussions,
- 4. case studies,
- 5. guest speakers,
- 6. reading
- 7. student presentations.

11. Teaching Media:

- 1. Overheads
- 2. Handouts

12. Course Achievement:

Assessment will be made from the stated criteria- students who receive more than 80% of the total points will receive Grade A.

13. Course Evaluation:

- 1. Class attention: 5%
- 2. Term Paper & Presentation: 25%
- 3. Final Exam: 70%

14. **References**:

- 1. Quality Control (5th edition). 1998. Besterfield, D.H. Prentice Hall, New Jersey.
- 2. Fundamentals of Quality Control for the Food Industry. Vol 1. 1970. Kramer, A. & Twigg, B.A. AVI. Westport, Conn.
- 3. *Total Quality Assurance for the Food Industries*. 1988. Gould, W.A. & Gould, R.W. CTI Publications.
- 4. *Principles of Food Sanitation* (3rd edition). 1994. Marriot, N.G., Chapman & Hall, New York.
- 5. Sanitation in Food Processing (2nd edition). 1993. Troller, J.A., Academic Press Inc., San Diego.

15. Course Coordinator:

Dr. Pairoj Luangpituksa, Biotechnology Dept.