COURSE SYLLABUS

1. **Name of Course**: Food Processing II

2. **Course Code**: ICFS 316

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

4. **Prerequisites**: ICFS 315 Food Processing I

5. **Type of Course**: Required

6. **Semester / Academic Year**: Second Trimester/2004

7. **Course Description**: Continuation of Food Processing sequence. Food Processing techniques including preservation by chilling, freezing, membrane technology, fractionation, fermentation, osmotic dehydration, and emerging processing technologies. Post processing operations. Processing factors that influence quality.

8. **Course Objectives**:
   1. Gain an understanding of basic food processing unit operations
   2. To integrate concepts in chemistry, biochemistry, physics, engineering, mathematics with food processing operations and understand their role in processing of food.
   3. To gain the ability to think critically about problems and issues in food processing
   4. To gain an appreciation for how the food processing industry's role in society.

9. Course Outline

Week	Topics				Instructor
	Lecture/Seminar	Hour	Lab	Hour	
1& 2	Chilling	8			Dr. Kohnhorst
3	Controlled- or Modified Atmosphere Storage and Packaging	4			Dr. Kohnhorst
4	Freezing	4			Dr. Kohnhorst
5	Freeze Drying and Freeze Concentration	4			Dr. Kohnhorst
6	Centrifugation, Filtration, Expression Midterm Examination	4 2			Dr. Kohnhorst
7	Extraction Using Solvents, Membrane Concentration	2			Dr. Kohnhorst

7 & 8	Extrusion	6			Dr. Kohnhorst
9 & 10	Fermentation Technology	6			Dr. Kohnhorst
11	Halal and Kosher Processing; Hurdle Processing; Osmotic Dehydration	4			Dr. Kohnhorst
	Total	44			

10. **Teaching Methods**:
    1. Lectures
    2. Movies
    3. Field Trips

11. **Teaching Media**:
    1. Textbook
    2. Powerpoint presentations
    3. Handouts on relevant topics

12. **Course Achievement**:
Assessment made from the stated criteria- students who receive more than 90% of the total points will receive a Grade A.

13. **Course Evaluation**:

Midterm Exam:	35%
Final Exam:	40%
Quizzes/ Class Participation:	15%
Attendance:	10%
Total	100%

14. **References**:
1. Fellows, P. Food Processing Technology, Principles and Practice. CRC Press, New York . 2000.

2. Potter, N.N. and Hotchkiss, J.H. *Food Science*, (5th Edition); Aspen Publishers, Inc., Gaithersburg, Maryland 1998. Call Number: TP370.P58; ISBN: 0-8342-1265-X

15. **Course Coordinator**: Dr. Andrew Kohnhorst