#### **COURSE SYLLABUS**

### 1. Name of Course:

Marine and Freshwater Products Technology

## 2. Course Code:

**ICFS 323** 

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

### 4. **Prerequisites**:

ICFS 313, ICFS 316

# 5. Type of Course:

Elective

### 6. Semester / Academic Year:

Term 3/2003

## 7. Course Description:

Study on processing and quality of foods from marine and freshwater sources

## 8. Course Objectives:

- 1. Gain an understanding of aquaculture and sea harvesting of seafood products such as fish, shellfish, crustaceans, and other types.
- 2. Achieve an in-depth knowledge of the methods and techniques of processing these fresh- and salt-water raw materials into finished seafood products for both domestic and export consumption.
- 2. To integrate concepts in chemistry, organic chemistry, and biochemistry, and food processing unit operations and how they are applied to seafood processing.
- 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    | Introduction to fisheries and      | 4    |     |      | Dr. Kohnhorst |
|      | aquaculture                        |      |     |      |               |
| 2    | How Seafood is Harvested           | 4    |     |      | Dr. Kohnhorst |
| 3    | Distribution Channels/marketing of | 4    |     |      | Dr. Kohnhorst |
|      | seafood                            |      |     |      |               |
| 4    | Chemistry of Seafood Components    | 4    |     |      | Dr. Kohnhorst |
| 5    | Quality of Seafoods/               | 2    |     |      | Dr. Kohnhorst |
|      | Preservation of Seafood Quality    |      |     |      |               |
| 5    | Midterm Examination                | 2    |     |      |               |
| 6    | Seafood Safety/ Seafood HACCP      | 4    |     |      | Dr. Kohnhorst |
| 7    | Sensory Assessment of Quality      | 4    |     |      | Dr. Kohnhorst |
| 8& 9 | Finished Seafood Products          | 8    |     |      | Dr. Kohnhorst |
| 10   | Surimi                             | 4    |     |      | Dr. Kohnhorst |
| 11   | Seafood By-Products                | 4    |     |      | Dr. Kohnhorst |
|      | Total                              | 44   |     |      | Dr. Kohnhorst |

## 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:

Attendance/Class Participation: 10% Quizzes/Outside Assignments: 15%

Midterm Exam: 35% Final Exam: 40%

### 14. **References**:

- 1. F. Shaidi and J.R. Botta. 1994. Seafoods Chemistry, Processing Technology, and Quality. Blackie Academic & Professional
- 2. Martin, R.E., Carter, E.P., Flick, Jr., G.J., Davis, L.M. 2000. Marine and Freshwater Products Handbook. Technomic Publishing Co.,

### 15. Course Coordinator:

Dr .Andrew Kohnhorst