

## COURSE SYLLABUS

### 1. INFORMATION OF COURSE AND LECTURER

- 1.1. Course name and code: Aquatic Resources Management – AQ625
- 1.2. Course specification: 2 Cred. (Theory: 1; Assignment: 0; Practice: 1), 30 hours (T: 13; A: 2; P: 15)
- 1.3. Prerequisites courses: Tropical Aquatic Ecology
- 1.4. Responsible Department: Department of Fisheries Resources Management and Economics, Faculty of Aquaculture and Fisheries, Can Tho University
- 1.5. Information of lecturer:  
Name: Tran Dac Dinh  
Email: tddinh@ctu.edu.vn  
Co-teaching lecturer:  
Name :  
Email:

### 2. COURSE DESCRIPTION

Aquatic resources management course is an optional course of the Master program in aquaculture. The course will provide for students the knowledge on the fisheries resources, fish population biology and fisheries management.

### 3. COURSE EXPECTED LEARNING OUTCOMES

*Theoretically:*

- To obtain the basic dynamics of fish population and fish abundance.
- To understand the fisheries management objectives and regulations.

*Practically:*

- To know how to determine fish stock abundance
- To estimate the fish population parameters.

### 4. COURSE CONTENTS

Chapters	Hours (T/A/P)
<b>Chapter 1: FISHERIES RESOURCES</b> <i>This chapter will provide knowledge on fisheries resources and fishing gears</i> 1.1. Mollusks 1.2. Echinoderms 1.3. Crustaceans 1.4. Fishes 1.5. Fisheries resources for aquaculture <i>In order to understand well this chapter, students should read references of [1].</i>	2/0/0

<p><b>Chapter 2: FISH POPULATION DYNAMICS</b></p> <p><i>This chapter will provide knowledge on fish abundance, methods to determine fish abundance and basic dynamics of fish population.</i></p> <p>2.1. Distribution and abundance</p> <p>2.2. Methods to determine the fish stock abundance</p> <p>2.3. Basic dynamics of fish population.</p> <p>2.4. Growth</p> <p>2.5. Recruitment</p> <p>2.6. Mortality</p> <p>2.7. Length at first capture (<math>L_c</math>) and length at first maturity (<math>L_m</math>)</p> <p><b>Assignment:</b> To determine the fish stock by using the fisheries databases.</p> <p><b>Practice:</b> To estimate the population parameters such as growth, recruitment and mortality by using the FiSAT II software.</p> <p><i>In order to understand well this chapter, students should read references of [1], [2] and [3].</i></p>	3/3/12
<p><b>Chapter 3: FISHERIES ASSESSMENT AND MONITORING</b></p> <p><i>This chapter will provide the methods how to assess and monitor the status of fisheries.</i></p> <p>3.1. Data requirements</p> <p>3.2. Data collection</p> <p>3.3. Data analyses and stock assessment</p> <p>3.4. Fisheries monitoring</p> <p><b>Assignment:</b> To collect and analysis fisheries databases of the Mekong Delta.</p> <p><i>In order to understand well this chapter, students should read references of [2], [3].</i></p>	2/3/0
<p><b>Chapter 4: FISHERIES MANAGEMENT</b></p> <p><i>This chapter will provide knowledge on the objectives and strategies of fisheries management; and fisheries regulations.</i></p> <p>4.1. Fishing gears</p> <p>4.2. Fisheries management objectives and strategies</p> <p>4.3. Fisheries regulations</p> <p><b>Practice:</b> To estimate the status of fisheries such as exploitation rate, length at first capture, ... by using the FiSAT II software.</p> <p><i>In order to understand well this chapter, students should read references of [2], [3].</i></p>	2/0/3

## **5. TEACHING METHODS AND ASSESSMENT**

### **5.1. Teaching methods:**

To teach the theory first and then apply to the practice by each chapter. The students also can join the research activities such as seminar, training, fish sampling, monitoring,...

### **5.2. Assessment methods:**

Practice:	40%
Mid-term examination:	20%
Assignment:	20%
Final examination:	20%

## **6. READING REFERENCES**

[1]. Gayanilo, F.C.; Sparre, P.; and Pauly, D. (1996) FiSAT: FAO-ICLARM stock assessment tools. User's manual, 126 pages.

[2]. King, M. (1995) Fisheries biology, assessment and management. Fishing News Books, 341 pages

[3]. Sparre, P., and Venema, S.C. (1989) Introduction to tropical fish stock assessment. Part I: Manual. FAO Fisheries Technical Paper 306/1, 337 pages

*Date: 31/10/2015*

**Lecturer**

**Tran Dac Dinh**