



*University of the Philippines Visayas*  
**COLLEGE OF FISHERIES AND OCEAN SCIENCES**  
 5023 Miagao, Iloilo

**CURRICULUM**  
**MASTER OF SCIENCE IN FISHERIES**  
**Major in AQUACULTURE**

<b>First Year</b>			
First Semester		Second Semester	
Course No. and Title	Units	Course No. and Title	Units
*Fisheries 205 Aquaculture Management	4	*Fisheries 202 Adv in Fish Health Management	3
*Fisheries 218 Advanced Aquatic Ecology	3	Fisheries 208 Fund of Experimental Designs	3
Fisheries 219 Advanced Fish Genetics	3	Elective	3
Elective	3	Elective	3
Total	13	Total	12
<b>Second Year</b>			
<u>First Semester</u>		<u>Second Semester</u>	
Fisheries 300 Thesis	6		
Total	6		
<b>Grand Total Number of Units</b>		<b>31</b>	

**List of Electives\* (Choice of any three subjects for a total of 9 units)**

<u>Course No. and Title</u>	Units
•Fisheries 222 Planktology	3
Fisheries 203 Advances in Hatchery Management	3
*Fisheries 204 Advanced Aquaculture Engineering	3
*Fisheries 207 Advances in Fish Nutrition	3
*Fisheries 217 Physiology of Aquatic Animals	3
Fisheries 220 Special Topics	3
•Fisheries 254 Histology of Aquatic Animals	3
Fisheries 258 Marine Biotechnology	3
Fisheries 290 Special Problem	3
MA 208 Coastal Resources Assessment and Management	3
MB 262 Marine Phytoplankton	3
<b>Required Courses .....</b>	<b>22</b>
<b>Elective .....</b>	<b>9</b>
<b>TOTAL .....</b>	<b>31</b>

**\*Including any 200-level Fisheries-related subject that will be approved by the CFOS Faculty**

**COURSE TITLE****COURSE DESCRIPTION AND PREREQUISITES**

- Fisheries 202 **ADVANCES IN FISH HEALTH MANAGEMENT.** Pathological Effects of Infectious and Non-Infectious Diseases in Fish, Shellfish and Crustaceans with Emphasis on Immunological Responses; Current Diagnostic Methods and Control Strategies in Aquaculture; and Environmental Factors that Influence Disease Transmission.  
Prerequisite: Any Course in Parasitology, Microbiology, Fish Diseases or Equivalent Course/s  
Course Credit: 3 units (2 hrs lect; 3 hrs lab)
- Fisheries 203 **ADVANCES IN HATCHERY MANAGEMENT.** Management Techniques, Strategies, and Recent Concepts in Hatchery Operation. Prerequisite: Introductory Hatchery Management or Animal Physiology.  
Course Credit: 3 units (2 hrs. lect; 3 hrs. lab)
- Fisheries 204 **ADVANCED AQUACULTURE ENGINEERING.** Infrastructure, Facilities, and Support Structures for the Culture of Aquatic Organisms. Prereq: Any Course in Trigonometry and Physics. Course Credit: 3 units (3 hrs lect)
- Fisheries 205 **AQUACULTURE MANAGEMENT.** The Integration and Rational Application of Knowledge and Various Approaches in attaining sustainable Production of Various Aquatic Organisms. Prereq: Introductory Aquaculture or Equivalent Course/s. Course Credit: 4 units (2 hrs lect.; 6 hrs. lab)
- Fisheries 207 **ADVANCES IN FISH NUTRITION.** Analysis of Nutritional Factors Complementing Various Aquaculture Systems and Aquaculture Production Goals; Current Feeding Techniques; and the General Aquatic Environmental Well Being. Prerequisite: Introductory Nutrition and Biochemistry Course Credit: 3 units (3 hrs lect)
- Fisheries 208 **FUNDAMENTAL OF EXPERIMENTAL DESIGNS.** Theory and Applications of Experimental Designs with Emphasis on Aquaculture Data Analysis.  
Prerequisite: Elementary Statistics or Consent of Instructor. Course Credit: 3 units (3 hrs lect)
- Fisheries 217 **PHYSIOLOGY OF AQUATIC ANIMALS.** Mechanisms of Cell and Tissue Adaptation to the Aquatic Environment. Prerequisite: Any Undergraduate Physiology Course. Course Credit: 3 units (3 hrs lect)
- Fisheries 218 **ADVANCED AQUATIC ECOLOGY.** Key Ecological Concepts and Insights pertaining to the Structure and Function of Aquatic Systems; New Developments and Contemporary Issues in Aquatic Ecology.  
Prerequisite: Basic Ecology or Equivalent Course/s. Course Credit: 3 units (3 hrs lect)
- Fisheries 219 **ADVANCED FISH GENETICS.** Application of the Principles of Genetics to Aquaculture.  
Prerequisite: Elementary Genetics. Course Credit: 3 units (2 hrs lect/3 hrs lab)
- Fisheries 220 **SPECIAL TOPICS.** Supervised Study in Areas/Aspects of Fisheries of Special Interest to Graduate Students.  
Prerequisite: Consent of Student's Program Adviser. Course Credit: 3 units (3 hrs lect)
- Fisheries 222 **PLANKTOLOGY.** Qualitative and Quantitative Analysis and Distribution of Plankton including Fish 102 (Aquatic Fauna) and Fish 111 (Aquatic Flora) or equivalent. Course Credit: 3 units
- Fisheries 254 **HISTOLOGY OF AQUATIC ANIMALS.** Structure and Function of Tissues of Representative Aquatic Organisms with Special Emphasis on Aquaculture Species. Prerequisite: Histology\*  
Course Credit: 3 units (2 hr lect; 3 hr lab)
- Fisheries 258 **MARINE BIOTECHNOLOGY.** Introduction to the Principles and Techniques of Biotechnology as Applied to Fisheries Science with Emphasis on Aquaculture.  
Prerequisite: Biochemistry and Genetics. Course Credit: 3 units (2 hrs lect/3 hrs lab)
- MA 208 **COASTAL RESOURCES ASSESSMENT AND MANAGEMENT.** Resources in the Coastal Areas, their Utilization, Assessment and Management. Prerequisite: None. Course Credit: 3 units (3 hrs lect)
- MB 262 **MARINE PHYTOPLANKTON.** Biology, Distribution, Diversity, Ecology of Marine Phytoplankton and their Contribution to Marine Productivity. Prerequisite: Consent of Instructor. Course Credit: 3 units (2 hrs lect/3 hrs lab)
- Fisheries 290 **SPECIAL PROBLEM.** Course Credit: 3 units
- Fisheries 300 **THESIS.** Course Credit: 6 units

Name of Student: \_\_\_\_\_

SN: \_\_\_\_\_

**CHECKLIST**  
**Master of Science in Fisheries**  
 Major in AQUACULTURE

<u>First Semester</u>			<u>Second Semester</u>		
Grade	Course No. and Title	Units	Grade	Course No. and Title	Units
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_____	Fish 218 Advanced Aquatic Ecology	3	_____	Fish 208 Fund of Experimental Designs	3
_____	Fish 219 Advanced Fish Genetics	3	_____	Elective _____	3
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	Total	<u>13</u>		Total	<u>12</u>

<u>First Semester</u>		<u>Second Semester</u>	
_____	Fisheries 300 Thesis	6	
	Total	<u>6</u>	

**Grand Total Number of Units    31**

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	<b>TOTAL</b>	<b><u>31</u></b>

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Extra Subjects Taken: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Deficiencies: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

EVALUATED BY: \_\_\_\_\_  
 Date: \_\_\_\_\_

GWA: \_\_\_\_\_