

**LIFS4360            Aquaculture Biotechnology**  
**Course Outline -   Spring 2019**

**1. Instructor(s)**

*Name: Prof. Joseph T.Y. WONG*

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**2. Teaching Assistant(s)**

*Name:*

*Contact Details:*

**3. Meeting Time and Venue**

*Lectures:*

**Date/Time:**    Wednesday (4:30pm – 5:50pm) and  
                         Friday (4:30pm – 5:50pm)

**Venue:**            Room 6573 (Lift 29/30)

**4. Course Description**

Credit Points: 3

Pre-requisite: LIFS 2040 or LIFS 2060

Exclusion: NIL

Brief Information/synopsis:

Overview of aquaculture in relation to food production and biotechnology. Examples of aquacultured species and aquaculture biotechnology enterprises. Aquaculture, biology and practices: larval rearing biotechnology, aquaculture nutrition, biotechnology of reproductive control in aquacultured species, applications of genetics and genetic manipulations in aquaculture. Problems and Perspectives.

*Prerequisite(s) : LIFS 2040 or LIFS 2060.*

## 5. Intended Learning Outcomes

Upon successful completion of this course, students should be able to:

	ILOs
1	Introduction to aquaculture biotechnology.
2	Identify the roles of aquaculture biotechnology.
3	Search for scientific information and make critical presentations.
4	Application of scientific knowledge to practice.

## 6. Assessment Scheme

<u>Assessment</u> <i>(Percentage + assessment tasks)</i>	<u>Assessing Course ILOs</u> <i>(Respective course ILOs)</i>
Project	1 - 4
Final Examination	1 - 3

## 7. Student Learning Resources – internet and library books

### 8. Teaching and Learning Activities -

- a. Lectures: aims to introduce the basics of aquaculture
- b. Research Project: focus on a specific aspect of aquaculture biotechnology

### 9. Course Schedule (temporary)

- Introduction to Aquaculture : Global Perspectives  
Aquacultural Systems
- Reproductive Control in aquaculture
- Aquaculture of Fish and Production Biology
- Hatchery and Larval Feeding Biotechnology,
- Aquaculture of Crustaceans and Production Biology
- Applications of Genetics; Genetic Manipulations in Aquaculture
- Aquaculture nutrition; Problems and Perspectives