

LIFS4360 Aquaculture Biotechnology
Course Outline - Spring 2020

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: Tuesday (9:00am – 10:20am) and
 Thursday (9:00am – 10:20am)

Venue: Room 2304 (Lift 17/18)

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