

Module Handbook: Fish and Environmental Health Management

Module designation	Framework and understanding of fish and environmental health management, aquaculture waste control, the interaction of environmental quality, host and pathogen, along with their management; the concept of biosecurity, fish/environmental health issues, and eco-labeling
Semester(s) in which the module is taught	2
Person responsible for the module	1. Dr. Ir. Triyanto, M.Si. 2. Dr. Ir. Bambang Triyatmo, M.P.
Language	Indonesian
Relation to curriculum	Compulsory Course
Teaching methods	Activities: a) Lecture (lecture and discussion) b) Examinations c) Take home assignments d) Quiz e) Student presentation

Workload (incl. contact hours, self-study hours)	1. Lecture 2 SKS x 50 minutes x 16 meetings = 1,600 minutes = 26.67 hours = 26.67 hours/30 hours = 0.89 ECTS 2. Structural Assignment 2 SKS x 60 minutes x 16 meetings = 1,920 minutes = 32.00 hours = 32.00 hours/30 hours = 1.07 ECTS 3. Self Study 2 SKS x 60 minutes x 16 meetings = 1,920 minutes = 32.00 hours = 32.00 hours/30 hours = 1.07 ECTS Total Workload = 3.02 ECTS
Credit points	2 Credit points
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	Program Learning Outcomes: PLO-P2: Able to examine problems and formulate appropriate solutions in the field of aquaculture/aquatic resource management/fish product technology PLO-KK2: Able to implement management principles in fisheries and marine businesses which include planning, organizing, conducting, monitoring, and evaluating.

Content	1. Introduction of fish and environmental health management 2. Aquaculture waste control 3. The interaction of environmental quality 4. Host and pathogen 5. The concept of biosecurity, fish/environmental health issues, and eco-labeling
Examination forms	Powerpoint, Laptop, LCD, eLearning Platform such as eLOK, simaster
Study and examination requirements	The minimum of student attendance is 70% from total 14 meetings to be eligible to take the final exams
Reading list	- Neville Carrington, Adrian Exell Batteries, Chris Andrews. 2003. Manual of Fish Health : Everything You Need to Know about Aquarium Fish, Their Environment and Disease Prevention. Firefly Books, The Limited. ISBN-101552978249 - A M Lusiastuti, Taukhid, Maskur, Murwantoko, S B Prayitno, D Sugiani and D Caruso. 2020. Building and improving the capacity of fish and environmental health management strategy in Indonesia. <i>IOP Conf. Ser.: Earth Environ. Sci.</i> 521 012016.