Module Handbook: Mariculture Management

A Module Handbook or collection of module descriptions that are also available for students to consult should contain the following information about the individual modules:

Module designation	Mariculture Management course is a compulsory course for students of Aquaculture study program. This course is given in the fifth semester fostered by the Teaching Team. After attending this course, students will know, understand, and explain the scope of mariculture management, mariculture technical and management for various commodities such as finfish, shellfish or mollusks, seaweed, and integrated systems.
Module level, if applicable	Undergraduate
Code, if applicable	PIA 20193163
Subtitle, if applicable	Manajemen Marikultur
Courses, if applicable	-
Semester(s) in which the module is taught	5th
Person responsible for the module	Ir. Sukardi, MP.
Lecturer	Ir. Sukardi, MP. Indah Istiqomah, S.Pi., M.Si., Ph.D.
Language	Indonesian
Relation to curriculum	Study Program, Compulsory

Type of teaching, contact hours	Activities: 1. Lecture offline and online (lecture, discussion, assignment; 50 min/meeting) 2. Examinations (mid-term and final exam) 3. Independent studies online platform (eLOK, eLISA) (quiz, examination, discussion, and private study) This course uses blended learning and SCL (small group discussion, case-based learning) method.
Workload	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 = 3.03 ECTS
Credit points	2 credit points
Requirements according to the examination regulations	Students must attend at least 70% of the total 14 class meetings to be eligible to take the final exams.
Recommended prerequisites	Fundamentals of Aquaculture

Module objectives/intended learning outcomes	Course Learning Outcomes: CO-1: Determine the location, design and construction of land-based and water-based mariculture (PLO3-PI). CO-2: Culture of various commodities, including seaweed, finfish, shellfish or mollusk, and integrated systems (PLO3-PI, PLO5-P3). CO-3: Create planning and management of mariculture business (PLO5-P3). Program Learning Outcomes: PLO3-P1: To be able to explain sustainable fisheries and marine systems, including management and utilization of aquatic resources, socio-economics, fish culture, and processing of fishery products. PLO5-P5: To be able to provide an in-depth explanation of the theoretical concepts of techniques and management of aquatic organisms cultivation in fresh, brackish, and/or marine water that are productive, high quality, and sustainable using the latest technology, which includes preparation of infrastructure, management of water, fish-seeds, feed, health, and harvest.

Content	Course Learning Outcomes CLO1 1. Scope and introduction 2. Site selection 3. Design and construction of land-based mariculture 4. Design and construction of water-based mariculture CLO2 ~~5.~~ Shellfish culture 6. Seaweed culture – 1 7. Seaweed culture – 2 8. Finfish culture (grouper) 9. Finfish culture (snapper) 10. Finfish culture (pomfret) 11. Sea cucumber culture (Coelenterata) 12. Integrated mariculture CLO3 13. Planning and management of mariculture business -1 14. Planning and management of mariculture business – 2
Study and examination requirements and forms of examination	Lectures Quizzes, paper, presentation Midterm examination Final examination

Media employed	LCD Zoom Video Textbook
Reading list	Sukardi, 2015. Bahan Ajar. Departemen Perikanan Fakultas Pertanian UGM. Stickney, R.R., and McVey, J.P., 2002. Responsible Marine Aquaculture, World Aquaculture Society, CABI Publishing. Beveridge, Malcolm, C.M. 2004. Cage Aquaculture, Third Edition, Blackwell Publishing. Bardach, J.E. 1977. Sustainable Aquaculture, John Wiley & Sons, Inc.