

## Module Handbook: Ornamental Fish Culture and Aquascape

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	Ornamental Fish Culture and Aquascape is an elective course <del>at</del> for students of the Aquaculture program study. This course studies the importance of ornamental fish, quality of ornamental fish, produce ornamental fish seeds, and management in ornamental fish culture. This course is equipped with a practices to provide skills to culture ornamental fish and create aquascape.
Module level, if applicable	Undergraduate
Code, if applicable	PIA 20193169
Subtitle, if applicable	Budidaya Ikan Hias dan Akuaskap
Courses, if applicable	-
Semester(s) in which the module is taught	7 <sup>th</sup>
Person responsible for the module	Dr. Ir. Ign. Hardaningsih, M.Si.
Lecturer	Dr. Ir. Ign. Hardaningsih, M.Si. Dr. Ir. Triyanto, M.Si.
Language	Indonesian
Relation to curriculum	Study Program, Elective
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	<p>1. Lecture  2 SKS x 50 minutes x 16 meetings = 1,600 minutes  = 26.67 hours  = 26.67 hours/  30 hours  = 0.89 ECTS</p> <p>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</p> <p>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</p> <p>Total  = 3.03 ECTS</p>
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. In addition, students must fully attend (100%) all of the effective laboratory sessions to be eligible to take the post-test.
Recommended prerequisites	Fundamentals of Aquaculture

<p>Module objectives/intended learning outcomes</p>	<p>Course Learning Outcomes:</p> <p>CO-1: Understand the quality of ornamental fish, standardization of ornamental fish, breeding ornamental fish, nursery and growout of ornamental fish (PLO3-PI).</p> <p>CO-2: Understand feeding and water quality management for ornamental fish culture and the principles of a healthy aquarium (PLO5-P3).</p> <p>CO-3: Able to culture of ornamental fish and create aquascape (PLO8-KK3).</p> <p>Program Learning Outcomes:</p> <p>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.</p> <p>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.</p> <p>PLO8-KK3: To be able to conduct aquaculture activity start from design and construct aquaculture containers and supporting facilities, manage to produce fish-seed, feeds, health, water quality, and harvest of freshwater, brackish water, and marine organisms through good fish hatchery practices and good aquaculture practices in environment, analyze of socio-economic.</p>
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Content	<p>Course Learning Outcomes:</p> <p>CLO1</p> <ol style="list-style-type: none"> <li>1. Introduction</li> <li>2. Factors affecting the quality of ornamental fish</li> <li>3. Standardization of the quality of ornamental fish</li> </ol> <p>CLO3</p> <ol style="list-style-type: none"> <li>4. Breeding ornamental fish</li> <li>5. Nursery and growout of ornamental fish</li> <li>6. Creating aquascape</li> </ol> <p>CLO2</p> <ol style="list-style-type: none"> <li>7. Feeding and water quality management</li> <li>8. Health management</li> </ol>
Study and examination requirements and forms of examination	<p>Lectures</p> <p>Quizzes, paper, presentation</p> <p>Laboratory sessions</p> <p>Midterm examination</p> <p>Final examination</p>
Media employed	<p>LCD</p> <p>Zoom</p> <p>Video</p> <p>Textbook</p> <p>Lab Manual</p>

Reading list	<p>Barrie, A. 1992. The Professional's Books of Koi. T.F.H. Publication. Inc., New Jersey.</p> <p>Cust, G. and G. Cox., 1984. Tropical Aquarium Fishes: Freshwater &amp; Marine. Hamlyn, London.</p> <p>Roberts, H.E. (Ed.), 2010. Fundamentals of Ornamental Fish Health. Blackwell Publ., Iowa.</p>
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