Module Handbook of Ichthyology

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	Ichthyology is a compulsory course for students of the Department of Fisheries including Aquaculture study program. This course is given in the second semester fostered by the Teaching Team. After attending this course, students are expected to be able to explain and identify fish, morphology and anatomy of fish, and organ system of fish.
Module level, if applicable	Undergraduate
Code, if applicable	PIA 20191252
Subtitle, if applicable	Iktiologi
Courses, if applicable	-
Semester(s) in which the module is taught	2nd
Person responsible for the module	Indah Istiqomah, S.Pi., M.Si., Ph.D.
Lecturer	Indah Istiqomah, S.Pi., M.Si., Ph.D. Dr. Ir. Triyanto, M.Si. Drs. Trijoko, M.Si.
Language	Indonesian
Relation to curriculum	Department, 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 Workload = 3.02 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	-

Module objectives/intended learning outcomes	The course learning outcomes are as follows: 1. CLO1: students are able to explain fish (PLO3-P1). 2. CLO-2:students are able to explain morphology and anatomy of fish (PLO3-P1). 3. CLO-3:students are able to explain the organ system of fish (PLO3-P1). Program Learning Outcomes: 1. PLO3-P1: having the ability to explain sustainable fisheries and marine systems, including management and utilization of aquatic resources, socio-economics, fish culture, and processing of fishery products.
Content	Course Learning Outcome CO1 1. Agnatha (jawless fishes) 2. Condrictyes 3. Osteocties 1 4. Osteichthyes 2 CO2 1. Anatomy of motion and skeleton 2. Muscle and nervous system 3. Integumentary, sight, and hearing system CO3 1. Respiratory System 2. Blood circulation system 3. Digestive System 4. Excretion System 5. Hormone System 6. Reproductive System 1 7. Reproductive System 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	a. Mandatory reading materials: 1. Lagler, K.F., Bardach, J.E., R.R. Miller dan D.R.M. Passino, 1977. Ichthyology. 2nd Ed. John Wiley & Sons. Inc. New York. 2. Bond, CE., 1996. Biology of Fishes. 2nd Ed. Brook/Cole/Thomson Learning. b. Recommended reading materials: 1. Journal Iktiologi Indonesia (Indonesian Journal of Ichthyology) 2. Journal of Fisheries Science 3. www.fishbase.org. 4. Other sites on the internet