



EXPECTED LEARNING OUTCOMES (ELOs) OF PROGRAMME

KNOWLEGES	
ELO 1	Apply mathematical, scientific, technical, social knowledge, and knowledge on contemporary issues in the field of Aquaculture
ELO 2	Analyze data to conduct surveys and research in the field of Aquaculture
ELO 3	Assess the quality of care, treatment, and health management of Aquaculture objects
ELO 4	Design the model of Aquaculture farming and seed production along the direction of clean production and ensuring safety food sources for human
SOFT SKILLS	
ELO 5	Apply creative thinking, critical thinking, and problem solving skills in variety of contexts
ELO 6	Work independently, lead the team, and manage the project towards its goals
ELO 7	Communicate effectively, understand cultural differences, read and understand English documents in the field of Aquaculture
PROFESSIONAL SKILLS	
ELO 8	Provide technical and business advice in the field of Aquaculture to benefit stakeholders (producers, traders, communities)
ELO 9	Use information technology and modern equipment of the Aquaculture sector effectively
ATTITUDES	
ELO 8	Provide technical and business advice in the field of Aquaculture to benefit stakeholders (producers, traders, communities)
ELO 9	Use information technology and modern equipment of the Aquaculture sector effectively

COURSE EXPECTED LEARNING OUTCOMES (CELOs)

Symbol	Expected learning outcomes of the course	ELOs of course
KNOWLEGES		
CELO 1	Apply the roles of natural food species in aquaculture	ELO2
CELO 2	Design the breed isolation procedure of natural foods	ELO2, ELO3 ELO4
CELO 3	Make plans for raising natural foods	ELO2, ELO3 ELO4
SOFT SKILLS		
CELO 4	Develop skills for independent work, teamwork	ELO5, ELO6
CELO 5	Use communication, presentation and report writing skills	ELO5, ELO7
PROFESSIONAL SKILLS		
CELO 6	Apply judgment, solving problems skills about farming environment and abnormal signs of the subjects	ELO5, ELO8
CELO 7	Prevent predators before, during and after the isolation and rearing procedure of natural foods	ELO5, ELO6 ELO8, ELO9
CELO 8	Advise techniques on raising natural foods	ELO5, ELO6 ELO8, ELO9
ATTITUDES		
CELO 9	Conscious of professional ethics	ELO10
CELO 10	Demonstrate a sense of self-study and self-research	ELO11



COURSE DESCRIPTION

The course aims to introduce students to the role of natural food species applied in aquaculture, identify steps to create a basis for creating natural food for aquatic animals, as well as identify methods of raising some natural food species. In addition, it trains students to cultivate, produce algae varieties, raise one of the natural food species (Brachionus, Moina, Artemia) to serve aquatic seed production. It also educates students to be aware of their own roles and responsibilities, adhere to the study rules, subject-loving attitude and to seriously detect hostile hazards in the process of raising and producing natural food.



COURSE CONTENT

- **Chapter 1:** The roles of natural foods
- **Chapter 2:** Isolation methods for microalgae breeding and Brachionus breeding
- **Chapter 3:** Microalgae culture techniques
- **Chapter 4:** Brachionus farming technique
- **Chapter 5:** Artemia farming techniques
- **Chapter 6:** Moina farming techniques

LEARNING METHODS

- Read material independently, ask related questions
- Listen the lectures, watch videos, discuss in groups
- Listen and answer questions
- Do homework, specialized reports
- Practice: Observe sample operations and perform sample manipulations independently
- Report on practical part



DUTIES OF STUDENTS

- Attendance: Students must attend at least 70% for the theory and 90% for the practical.
- Preparation: Students must read teaching materials, reference books and search for materials provided and introduced by lecturers.
- Attitude: actively participating in questioning, commenting, critical review, evaluation and marketing



RATING AND SCORING

- Score scale: 10
- Process evaluation: 50% (short question, presentation, practise in lab)
- Final exam: 50% (paper test)
- Number of credits: 3 credits (1 theory credits, 2 practice credits)
- Semester: 4 (2nd semester, 2nd year)