



Lab Study: Aquaculture Biology

Activity Outline

Year Level 9-10

This activity introduces students to the fastest growing primary industry in the world. Students will investigate the nature and scope of aquaculture and the requirements necessary for the successful culture of various organisms through theoretical and practical investigation. Students will gain insight on general parameters necessary for the successful culture of marine organisms. As part of the activity, students will conduct a first-hand investigation of differing morphological features through dissection of fish, prawn, and oyster to identify key anatomical features. Students will also be led through the National Marine Science Centre's aquaculture facility.

Key terms:

aquaculture, nutrition, genetics, disease, reproduction, suitability, biotic, abiotic, water quality, cost/benefit, food conversion ratio (FCR), marketability

Outcomes:

Marine and Aquaculture Technology Stage 4/5 Syllabus

Aquaculture Focus Area;

Module 23 – Underwater Farming

Module 24 – Designing Systems for Aquaculture

Module 28 – Growing Crustaceans

Module 29 – Fish Biology

Outcomes 5.2.2, 5.3.1, 5.5.1, 5.5.2, 5.7.1, 5.7.2, LS.1, LS.2, LS.3, LS.4, LS.5, LS.7, LS.8, LS.11

NESA Science Year 7-10 Syllabus

Year 9: ACSSU175, ACSSU176, ACSIS164, ACSIS165, ACSIS166, ACSIS174

Year 10: ACSIS198, ACSIS199, ACSIS200, ACSIS208

Key competencies

Collecting, analysing and organising information

Communicating ideas and information

Working with others and in teams

Working scientifically

Using technology