



Lab Study: Aquaculture – System Requirements

Activity Outline

Year Level 9 -12

This activity introduces students to the fastest growing primary industry in the nation. 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.

Key terms

Intensive aquaculture, extensive aquaculture, nutrition, genetics, disease, noxious species, reproduction, suitability, biological parameters, chemical parameters, physical parameters, water quality, site selection

Outcomes

This activity is designed to address the outcomes from the following BOS NSW Content Endorsed Course 6 syllabuses;

MARINE STUDIES Stage 6 Syllabus (2000);

Optional Module 11: Aquaculture

Objectives 1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 3.3

BIOLOGY Stage 6 Syllabus (2002);

Objectives P3, 4, 5, 7, 8, 9, 11, 12, 13, 14, 15, 16

Objectives H3, 4, 5, 7, 8, 11, 12, 13, 14, 15, 16

Key competencies

The following key competencies are essential components to student learning and as a result have been embedded within the above learning activity.

- Collecting, analysing and organising information
- Communicating ideas and information
- Working with others and in teams
- Working scientifically
- Using technology

Activity description:

Students will gain insight through a power point presentation 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.