

Course Outline

Course Title: Clam Beach Survey: Data Analysis

Course Code: AQUA 555T

Total Hours: 21 Hours

Description: Clam Beach Survey: Data Analysis is a computer-oriented course, which examines and analyzes shellfish stock information collected from a beach survey. This information and the analysis will be used to create a report, according to the requirements of Fisheries and Oceans Canada. The principles of data management, probability sampling, statistical notation, digital mapping, and estimating population parameters will be presented and discussed. Survey principles and techniques are also presented. Recommended: Completion of AQUA 550T and basic computer skills.

Course Objectives:

The student will be able to:

- Analyze biological data collected from an intertidal beach survey to provide information on number of clams and weight, species, as well as length, weight, age, and height of individual animals;
- Present analysis through graphs showing frequency distributions, length weight relationships and growth relationships;
- Use a provided Microsoft Excel spreadsheet to carry out statistical analyses of the survey data; and
- Interpret the data analyses and prepare a final survey report.

Course Modules:

Module 1: Introduction

Module 2: Analysis of Number and Weight Data

Module 3: Analysis of Biological Data

Prerequisites: Recommended:

- Completion of *Clam Beach Survey: Field Methods* (AQUA 550T). Some exceptions may apply. Students who have not completed this course must have their own data set for analysis;
- Basic computer skills.

Evaluation: Attendance; successful completion of assignments, practical exercises and/or test.