Data Collection for Environmental Professionals - Syllabus

Duration: 2 Weeks   **Credit Hours:** 8 Hours

General Information

Data are the observations made about the environment that are the results of measurements.   Environmental professionals collect data for analysis, which is then used to make decisions. We need to be able to collect relevant data in the appropriate sample sizes, in order to measure our environment with the least amount of error.

Topics covered in this course include:

- Importance of data collection
- Types of environmental data collected
- Developing a data collection plan
- Calculating basic data statistics (mean, standard deviation, etc)
- Determining statistically valid sample sizes
- Calculating confidence intervals for the mean
- Developing operational definitions for the metrics
- Data sampling strategies (random, systemic, etc)
- Introduction to data measurement error (accuracy and precision)

Course Description

We will cover these topics and more in only two weeks! This is a great opportunity to enhance your analytical skills and improve your overall knowledge of data collection. Hands-on data management and the preparation of instructor lead assignments are all part of this workshop.

Course Requirements

This introductory workshop is offered entirely online and can be completed on your own schedule over the course of two weeks. Each week you will participate in online classroom discussions, watch video presentations, and complete class assignments all from the convenience of your home or office.   You can work on the class at a time that is most suitable to your schedule. There is no need to log in at any particular time to participate in this program.

Instructor Contact - Directly within the class via Moodle email

Plagiarism and Writing Standards

The Swamp School's expectation is that all student work will be original. A detailed description of our policy on proper submission of an assignment is outlined in our Plagiarism Statement and Writing Standards.

Grading*

Week 1 Quiz - 40%
Week 2 Quiz - 40%
Daily Class Discussions - 20%

   *A minimum overall grade of 80% is required to pass this class.

Quizzes and Tests

Quizzes open and close on the dates specified in the activity. They cannot be taken early, and special permission is needed to take them after they close.

Course Schedule

Week	Topic
Week 1	Data Collection Part 1 Week 1 Quiz
Week 2	Data Collection Part 2 Week 2 Quiz

Certification

Students that successfully complete the assignments and quizzes will be awarded a certificate of training for their records.