

EVS 616

Summer, 2008

<http://www.ci.uri.edu/ciip/SummerPracticum/default.html>

Instructors:

Candace Oviatt coviatt@gso.uri.edu

Art Gold agold@uri.edu

Q Kellogg qkellogg@uri.edu

Format:

Over a five week period, the class will explore five different field study units focused on different aspects of coastal science. For each unit students will review and discuss key articles, gain first-hand knowledge of scientific instruments and monitoring approaches, examine datasets and synthesize results.

Goal:

For each field study we expect that students will gain an understanding of the types of methods and field experiments that are used to address coastal management questions, such as:

- What types of scientific uncertainties stymie coastal managers?
- How can these uncertainties be addressed through tractable experiments using accepted methods?
- What are the advantages, challenges and limitations of the methods that will be highlighted in each activity?

Grading:

This course will be graded with letter grades. Grades will be based on class participation and evaluations of each written assignment.

Written Assignments:

For Weeks 1, 2 and 4 students will be expected to prepare a brief (3 to 5 pages) scientific report based on the data and methods presented in each unit (Note: Week 5 will not follow this format). We will either provide a dataset for these write-ups or the data will be collected during the field study unit. The write-up needs to have the following components:

Introduction:

What is the coastal issue?

Who are the concerned audiences?

What is the nature of the study?

How do these types of studies contribute to coastal management?

Methods:

What is being measured?

What is the experimental design?

What are the characteristics of successful study sites? (scale, time of year, isolation, setting)

How are measurements obtained?

What are the compelling motivations for using the instrumentation?

Are the measurements easy to obtain – are they time consuming or costly?

How are the measurements analyzed?

Results:

Summarize the data in tabular or graphical format.

Address whether the instrumentation performed as expected?

Use simple statistics as appropriate.

Discussion:

Place your results in perspective with the work of others – refer to the readings!!! We encourage you to use the web to augment your understanding of elements that are unclear or confusing in the articles.

What are the challenges of successful measurement?

What constraints are associated with the method?

What are the sources of uncertainty and potential confounding factors?

What are the implications of this type of work?

References:

In addition to referencing the required readings, you should reference useful websites or other sources that helped frame your understanding.

Other Assignments:

During Week 3, class participants will be expected to present different aspects of the science and findings of the Baltimore LTER during a structured half-day session in advance of the field trip. No written assignment is required following the Baltimore trip.

For Week 5 students will work in a single group and prepare a LOGIC model that delineates outcomes, inputs and activities related to the CRMC conference. An assessment survey will then be prepared for the conference.

Be an active learner!

Be sure to ask your instructors specific questions during each module to assure that you understand how you're going to address each component of the paper.

Calendar of Activities:

For the most current schedule, please visit the class website:

<http://www.ci.uri.edu/ciip/SummerPracticum/Default.html>

Week of May 19	<u>Fish Monitoring in Narragansett Bay</u> Monday 8 a.m. – mid-afternoon: Fish trawl aboard the Cap'n Bert. Tuesday 9 a.m. – Discussion of readings, data analysis, work on written assignment (due Wed. at noon).
Week of May 27	<u>Oxygen Monitoring in Narragansett Bay</u> Tuesday 8 a.m. – ? : CTD survey for hypoxia in Greenwich Bay aboard the Eastern Surveyor. Wednesday 9 a.m. – Discussion of readings, data analysis, work on written assignment (due Thurs. at noon)
Week of June 2	<u>Baltimore Long Term Ecological Research (LTER) Site</u> Monday 8:30 a.m.- 11:30 a.m.: Literature discussion Monday 1:00 p.m. Meet at T.F. Green Airport for Southwest flight PVD to BWI, departing at 2:30. Tuesday and Wednesday: Watershed studies, social aspects of the BES-LTER, discussions with Peter Groffman. Wednesday p.m.: Return to Providence.
Week of June 9	<u>Surveys and Social Modeling</u> TBD
Week of June 16	<u>CRMC Conference on Climate Change in Rhode Island</u> Pre-conference: Prepare assessment survey using LOGIC model Monday: Assist with all preparation activities Tuesday: Assist with all conference activities