Course Outline and Syllabus

OCE4930-2 and OCC5419c-1

Advanced Biogeochemistry: Field Methods and Concepts

Spring, 2008

Course Time: Two days per week for five weeks

Place: FSU Coastal and Marine Laboratory (http://www.marinelab.fsu.edu/) and the Kostka Laboratory (http://www.joelkostka.net). Please see address below for Kostka office.

Instructor: Joel E. Kostka
Office: Room 312
Leroy Collins Research Lab (Nuclear Research Building)
255 Atomic Way, Bldg. 42
Email address: jkostka@ocean.fsu.edu
Phone: 644-5719

Course Prerequisite: General biology and CHM 1046 or equivalent

Breakdown of Grading:
Undergraduate section:

75 %	4 Field/ lab exercises
25%	Final exam

Graduate section:

50 %	4 Field/ lab exercises
25%	Final exam
25%	Term paper

Course Description:
This course is intended to 1) teach students a hands-on approach for the elucidation/ quantification of environmental parameters and microbial processes which are important to the ecology of coastal marine environments, and 2) provide students with a tool-kit of relevant field and laboratory techniques which may be used in a variety of environmental settings. It is recommended for any natural or physical science student interested in obtaining experience with such methods in order to strengthen their thesis work or to increase their job possibilities. Students in the course are expected to have sufficient

background in general biology, chemistry, and mathematics to be able to understand the lab book and do simple problems.

Course Format:
This course will consist of short (30 min.) lectures supplemented with relevant scientific papers. Exercises will be evenly spaced throughout the scheduled course period. These exercises will involve obtaining samples or data in the field, analyzing samples in the laboratory, making calculations and synthesizing the data, and answering simple questions about the environmental parameter or process studied.

Accommodations for students with disabilities:
Students with disabilities needing academic accommodations should:
1) Register with the Student Disability Resource Center (SDRC).
2) Bring a letter to the instructor from the SDRC indicating you need academic accommodations. If at all possible, this should be done within the first week of class.
Note: The FSU SDR Center is in Kellum Hall, room 8; phone number is 644-9566 (voice); TDD is 644-8504; fax is 644-7164. for a map of how to get to Kellum Hall.

Honor Code:
Students in this course are bound by the FSU Academic Honor Code as written in the FSU Student Handbook. You have the responsibility to: 1) uphold the highest standards of academic integrity in your work, 2) refuse to tolerate violations of academic integrity in the University community, and 3) foster a high sense of integrity and social responsibility on the part of the University community.

Course Schedule:

Weeks 1- Nutrients

Week 2- Oxygen

Week 3- Organic matter remineralization

Week 4- Nitrogen cycle

Week 5- Final exam and wrapup