



Dowling College Graduate Course Offering for Summer July 2011

Marine Chemistry - CHM 6687 - Marinating MST

Learn how to use the local marine environment to teach common Math, Science and Technology topics in the classroom, field and laboratory.

The course will consist of several sessions in the classrooms and well-equipped laboratories at the waterfront Oakdale campus of Dowling College and then move out into the field to simulate class trips on campus, in the estuarine, fresh and saltwater environments with several shipboard experiences. Topics discussed will include identification, classification and life histories of local aquatic plankton, invertebrate and vertebrate organisms, water chemistry, monitoring, stewardship, pollution, and climate change among others. Participants will learn several methods for the determination of each aquatic parameter including nitrates, nitrites, ammonia, pH, phosphates, oxygen, salinity, temperature, and density.

This class is suitable for Science, Math or Technology teachers in the grades 6 through 12 desirous of infusing marine science into existing courses or as the basis for a standalone course.

All participants, who make a commitment to utilize it with their students, will receive a water sampling kit and password to enter data into the South Shore Estuary Learning Facilitator (sSELF) dataset

<http://www.seagrant.sunysb.edu/nysmea/resources-for-educators-sSELF.php>

on the New York State Marine Education Association (NYSMEA,) website. (<http://www.NYSMEA.org/>)

Course Title Marine Chemistry (3 graduate Credits,) CHM 6687

Dates: 5 Fridays. 7/8,7/15,7/22,7/29, and 8/5

Time: Each class would meet for 7.5 hours/day from 8:00AM to 3:30PM

3 graduate credits at Dowling, ([costs](http://www.dowling.edu/admissions/tuition.shtm)) <http://www.dowling.edu/admissions/tuition.shtm>

Noyce Scholars (<http://www.dowling.edu/noyce/>) can use Professional Development Funds.

The instructor is adjunct associate professor, Lou Siegel who has taught Marine Science and been the Chairperson of the Departments of Science, Oceanography and Technology at the experimental John Dewey High School (Brooklyn,) Beach Channel High School (Queens,) and Oceanside High School in Nassau County. He has taught Biology, Marine Biology and Environmental Sciences at SUNY Farmingdale, and Dowling College and is the past president and board member of the New York State Marine Education Association. Lou is currently the Science Coordinator for the Long Island South Shore Estuary Reserve.

Please contact Lou Siegel at Siegell@dowling.edu As soon as possible to express interest