



# NEW YORK CITY COLLEGE OF TECHNOLOGY

THE CITY UNIVERSITY OF NEW YORK

300 JAY STREET, BROOKLYN, NY 11201-1909

MATHEMATICS DEPARTMENT  
Namm 711  
718.260.5380 • Fax: 718.254.8537

April 29, 2013

Dear Professor Hellerman,

Starting Fall 2013, Department of Chemistry at New York City College of Technology will be offering Environmental Science I and II Courses (ESCI 1110, ESCI 1210). The goal of the courses are to provide students the scientific principles, concepts, and methodologies required to understand the inter-relationships of the natural world, to identify and analyze environmental problems of Brooklyn Waterfront both natural and human-made, and to examine alternative solutions for resolving or preventing them.

Environmental Science I course ESCI 1110 offers a hands-on fieldwork. Students will be gathering various environmental data (water, soil, air data etc.) in local gardens, parks, and wetlands from off campus sites. Then they will analyze the data and make decisions based on their findings. For the students to have access to a high tech compost machine on campus will allow them to collect data related to the aerobic decomposition of plant matter in a controlled environment. They will also be able to perform service to the community by giving this compost to community gardens and schools.

The course is interdisciplinary; it contains a wide variety of topics from different areas of study. Yet there are several major unifying constructs, or themes, that cut across the many topics included in the study of environmental science. The course introduces foundational concepts in physics, chemistry, and biology; reinforces mathematical skills and understanding through application of concepts to real-world problems; provide the rigorous approach of a traditional undergraduate laboratory science course, but include the local environment beyond the classroom to augment the laboratory experience. This non-traditional laboratory component of the courses will allow students to learn about the environment through firsthand observation both in the laboratory and in the field.

Interdisciplinary nature of the course along with its local (Brooklyn Waterfront) examples and projects will help students relate science into their respective disciplines while creating an awareness of environmental issues (e.g., global climate change, habitat destruction, the origin and fate of industrial brownfields, urban agriculture, sea level rise etc.). Therefore, this course will address the growing need and curiosity to understand these environmental issues.

Access to a high tech compost machine on campus will complete the urban agriculture component of the course.

Sincerely,

A handwritten signature in blue ink, appearing to read "Huseyin Yuce".

Huseyin Yuce, Ph.D.  
Associate Professor