LEHMANN COLLEGE
OF THE
CITY UNIVERSITY OF NEW YORK

DEPARTMENT OF
EARTH, ENVIRONMENTAL, and GEOSPATIAL SCIENCES

CURRICULUM CHANGE

1. **Type of change:** New Course

2. **Course Description:**

   **GEP 662: Introduction to Programming for GISc. 3 credits.** 4 hours.
   Programming and scripting for Geographic Information Science (GISc) with a focus on applying programming methods to answer geographic questions. Students will learn how to use programming to automate geoprocessing tasks and develop new analytical tools. PREREQ: GEP 505 or instructor’s permission.

3. **Rationale:**
   This course will serve as an elective in the graduate GISc course offerings and supports the EEGS Department coursework. Understanding how programming methods can be applied to answer geographic questions and increase productivity is essential for graduate students studying geographic information sciences. Additionally, this course will be financed by the Graduate Center and will later count toward the GISc Masters program once it is approved at the state level. The program is expected to begin in fall 2012.

4. **Learning Objectives:**
   By the end of the course students will be able to:
   - Acquire knowledge of fundamental programming concepts
   - Automate geoprocessing tasks
   - Develop new analytical tools
   - Customize the GIS desktop interface to integrate new tools
   - Evaluate ways that programming methods can be applied to GISc projects

5. **Date of Departmental Approval:** April 18, 2012