

**LEHMAN COLLEGE
OF THE
CITY UNIVERSITY OF NEW YORK**

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

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

2.

Department(s)	Biological Sciences
Career	<input type="checkbox"/> Undergraduate <input checked="" type="checkbox"/> Graduate
Academic Level	<input checked="" type="checkbox"/> Regular <input type="checkbox"/> Compensatory <input type="checkbox"/> Developmental <input type="checkbox"/> Remedial
Subject Area	Ecology
Course Prefix & Number	BIO 503
Course Title	Topics in Urban Ecology
Description	Exploration of the study of interrelationships between organisms and their biotic and abiotic environment in relation to urban settings, including population and community interactions; the nature of the niche; endangered species within city settings; the urban heat island effect; and human's role in the system. Students will learn how to gather and interpret local ecological data to understand the complexity of ecosystems.
Pre/ Co Requisites	Departmental permission.
Credits	3
Hours	3
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc)	
General Education Component	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required <input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science <input type="checkbox"/> Flexible <input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity

_____ Creative Expression
_____ Individual and Society
_____ Scientific World

3. **Rationale:**

Understanding ecology is important since it provides insights into the myriad environmental issues confronting us both at the regional and global scale. This class specifically is designed for MEd students in Middle and Secondary Science Teaching who require background in earth sciences, for which there is no comparable course offered at Lehman. Through introductory lectures, discussions of current topics, and practical demonstrations on Lehman's campus, this class will show STEM teachers how to use their surrounding environment as a 'living classroom' for exploring urban ecology, which can be adapted to any city park or green space within walking distance. Information gained within an urban framework can be applied transnationally to understand some of the important environmental issues confronting our era. This class also will be open as a Master's elective for Biology students (B.A.) who may not have the time to take the department's longer Ecological Applications course. This course is being proposed as an experimental course to assess preliminary student interest in the subject matter.

4. **Learning Outcomes (By the end of the course students will be expected to):**

1. Understand biotic and abiotic factors affect the abundance and distribution of organisms in space and time
2. Critically interpret and evaluate work published in both the primary literature and popular press
3. Work as a group to observe patterns and interpret data to address interesting ecological questions through the design and execution of simple experiments
4. Effectively communicate findings in both written and oral format to one's peers, professionals, and community
5. Understand how ecological concepts that play out uniquely in urban settings are applicable to global scale problems affecting all of humanity
6. Become more responsible and engaged citizens through an awareness and appreciation of modern ecological issues

5. **Date of Departmental Approval:** 3/30/16