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

DEPARTMENT OF EARTH, ENVIRONMENTAL AND GEOSPATIAL SCIENCES

CURRICULUM CHANGE

1. **Type of Change:** Pre-requisite, Description

2. **From:** ~~Strikethrough~~ the changes

Department(s)	Earth, Environmental, and Geospatial Sciences (EGGS)
Career	[X] Undergraduate [ ] Graduate
Academic Level	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial
Subject Area	Geography
Course Prefix & Number	GEP 321
Course Title	Introduction to Remote Sensing
Description	Fundamental of remote sensing, energy interactions between the sun, atmosphere and features on the earth surface. Structure of raster data, cell size, and both passive and active remote sensing. Spatial, spectral, radiometric and temporal resolution characteristics of different multispectral remotely sensed data using specialized image analysis software.
Pre/ Co Requisites	NA
Credits	4
Hours	5
Liberal Arts	[X] Yes [ ] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA

General Education Component	_X__ Not Applicable
	_____ Required
	    _____ English Composition
	    _____ Mathematics
	    _____ Science
	
	_____ Flexible
	    _____ World Cultures
	    _____ US Experience in its Diversity
	    _____ Creative Expression

	_____ Individual and Society _____ Scientific World

3. **To:** Underline the changes

Department(s)	Earth, Environmental, and Geospatial Sciences (EGGS)
Career	[X] Undergraduate [ ] Graduate
Academic Level	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial
Subject Area	Geography
Course Prefix & Number	GEP 321
Course Title	Introduction to Remote Sensing
Description	Fundamentals of remote sensing, energy interactions between the sun, atmosphere, and features on the earth surface. Structure of raster data, cell size, and both passive and active remote sensing. Spatial, spectral, radiometric and temporal resolution characteristics of different multispectral remotely sensed data using specialized image analysis software.
Pre/ Co Requisites	GEP 204 OR GEP 205 OR GEP/ENV 251
Credits	4
Hours	5
Liberal Arts	[X] Yes [ ] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA

General Education Component	__X_ Not Applicable
	_____ Required
	    _____ English Composition
	    _____ Mathematics
	    _____ Science
	
	_____ Flexible
	    _____ World Cultures
	    _____ US Experience in its Diversity
	    _____ Creative Expression
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	    _____ Scientific World

4. **Rationale (Explain how this change will impact the learning outcomes of the department and Major/Program):**

Prior experience with Geographic Information Systems software has proven fundamental to the successful completion of this course. The learning outcomes of the department and major will not be affected by this change in course pre-requisite, but it is expected that students' performance in GEP 321 will improve.

5. **<u>Date of departmental approval</u>:** 4/13/2021

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DEPARTMENT OF EARTH, ENVIRONMENTAL AND GEOSPATIAL
SCIENCES

CURRICULUM CHANGE

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

2.

Department(s)	Earth, Environmental and Geospatial Sciences
Career	[X] Undergraduate [ ] Graduate
Academic Level	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial
Subject Area	Environmental Science; Geography
Course Prefix & Number	ENV/GEP 251
Course Title	Introduction to digital data for environmental science
Description	Use of digital data and databases in environmental science, data sources and analytical techniques.
Pre/ Co Requisites	Co-Requisite BIO 251
Credits	2
Hours	4
Liberal Arts	[X] Yes [ ] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA

General Education Component	__X_ Not Applicable
	_____ Required
	        _____ English Composition
	_____ Mathematics
	_____ Science
	_____ Flexible
	_____ World Cultures
	        _____ US Experience in its Diversity
	_____ Creative Expression
	_____ Individual and Society
	        _____ Scientific World

3. **Rationale:**
ENV/GEP 251 was approved as an experimental course, but was canceled due to low enrollment. We are asking to make the course permanent so that it can be added to the Bio-BS Bioenvironmental Track as an offering that counts towards the B.S. in Biology

degree. Making ENV/GEP 251 a permanent course and having it as a co-requisite of BIO251 will enhance its potential to get full enrollment to be offered on a regular basis.

4. **Learning Outcomes (By the end of the course students will be expected to):**
> Learning Objectives include:
- Demonstrate knowledge of various types of digital databases used in environmental science;
- Apply digital data to various topics in environmental science using visualization and analysis;
- Use course material as a supplement to develop research/project topics;

5. **Date of Departmental Approval:** 10/07/2021