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	[X] Undergraduate [ ] Graduate
Academic Level	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial
Subject Area	Biology
Course Prefix & Number	BIO 411
Course Title	Principles of Virology
Description	An introduction to the science of virology that explores the structure and function of viruses, their lifestyle, their evolved pathways, and their positive as well as negative effects on human population.
Pre/ Co Requisites	BIO 166, BIO 167, BIO 238, and BIO 331
Credits	2
Hours	2
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:**
The course will enhance students' knowledge of biological organisms that are causes of numerous diseases and yet play an important role in maintaining the ecosystem of our planet. The course will fulfill the mission of the program by guiding students to practice thinking critically about biological processes.

4. **Learning Outcomes (By the end of the course students will be expected to):**
1. identify viral structural components.
2. define the stages of virus replication.
3. explain methods of virus pathogenesis.
4. evaluate the role of viruses.
5. demonstrate the ability to think critically about viral mechanisms through in class discussions and small group activities.
6. apply their attained knowledge to generate a written report and oral presentation.

5. **Date of Departmental Approval:** October 31, 2017

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DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

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

2.

Department(s)	Biological Sciences
Career	[X] Undergraduate [ ] Graduate
Academic Level	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial
Subject Area	Biology
Course Prefix & Number	Bio 175
Course Title	Explorations in Biology Media
Description	Fundamental biological concepts and communication of those and other complex scientific ideas to the public using a variety of multimedia digital platforms. Evaluate scientific claims using quantitative literacy skills; explore how science informs policy making; and, assess how the impact of science on society influences life in the U.S. and globally.
Pre/ Co Requisites	NA
Credits	3
Hours	3
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:** This course will provide a survey of fundamental biological concepts as well as hands-on training in a variety of multimedia tools that will enable students to effectively communicate these concepts and promote science literacy on a variety of media forums. Students will also acquire the training necessary to effectively navigate the evolving landscape of science communications in the 21st century. There is a pressing demand for workers skilled in science communication. Experiential learning: Students will create original scientific-based media content to upload to Lehman College community websites. Students will be exposed to scientific professional and career opportunities through tours and interviews with Bronx academic, research and historical institutions. Students will receive exposure to professional journalism practices by partnering with local media outlets and CUNY campuses (News12 and CUNY School of Journalism/CUNY Graduate Center).

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

- Be conversant on a broad range of topics in Biology and Biomedicine and be skilled in translating complex scientific concepts to a broad audience.
- Be able to apply quantitative literacy skills in analysis of scientific claims, and effectively communicate these analyses.
- Have learned the basics of science communication, including fundamental elements of writing, producing, interviewing, and communicating to the public.
- Organize ideas for written and oral communication
- Extract and assimilate key concepts in science and technology from a literary source

5. **Date of Departmental Approval**: October 18, 2017