

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

DEPARTMENT OF BIOLOGICAL SCIENCES

CURRICULUM CHANGE

1. Type of Change: (description, *pre or corequisite*)

2. From: Strikethrough the changes

Department(s)	Biological Sciences
Career	<input checked="" type="checkbox"/> Undergraduate <input type="checkbox"/> Graduate
Academic Level	<input checked="" type="checkbox"/> Regular <input type="checkbox"/> Compensatory <input type="checkbox"/> Developmental <input type="checkbox"/> Remedial
Subject Area	Biology
Course Prefix & Number	BIO 420
Course Title	Molecular Biology
Description	Discussion of structure and function of nucleic acids and proteins and their synthesis in vivo and in vitro. Basic concepts in molecular genetics are studied, with special emphasis on the molecular architecture of the gene, its action, and regulations in bacteria and bacteriophages. Laboratory experiments include techniques for isolation and quantitation of nucleic acids from cells, use of the cell-free synthesizing systems, and basic procedures in microbial genetics.
Pre/ Co Requisites	BIO 166 and BIO 167 and BIO 238 and CHE 234 and CHE 235 and BIO 400 or CHE 444.
Credits	4
Hours	6 (2 lecture, 4 lab)
Liberal Arts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Course Attribute (e.g. Writing Intensive, WAC, etc)	
General Education Component	<p><input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Required</p> <p><input type="checkbox"/> English Composition <input type="checkbox"/> Mathematics <input type="checkbox"/> Science</p> <p><input type="checkbox"/> Flexible</p> <p><input type="checkbox"/> World Cultures <input type="checkbox"/> US Experience in its Diversity <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society</p>

_____ Scientific World**3. To: Underline the changes**

Department(s)	Biological Sciences
Career	<input checked="" type="checkbox"/> Undergraduate <input type="checkbox"/> Graduate
Academic Level	<input checked="" type="checkbox"/> Regular <input type="checkbox"/> Compensatory <input type="checkbox"/> Developmental <input type="checkbox"/> Remedial
Subject Area	Biology
Course Prefix & Number	BIO 420
Course Title	Molecular Biology
Description	<u>Essential highlights of how molecular mechanisms are directly connected to human health, disease, and therapeutic breakthroughs.</u> <u>Engagement of students in case studies, primary literature, experimental techniques and problem solving activities</u>
Pre/ Co Requisites	BIO 166 and BIO 167 and BIO 238 <u>and BIO 239</u> and CHE 234 and CHE 235
Credits	4
Hours	6 (2 lecture, 4 lab)
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 <input type="checkbox"/> Creative Expression <input type="checkbox"/> Individual and Society <input type="checkbox"/> Scientific World

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

The proposal to remove the biochemistry prerequisite and revise the course description for Bio 420 aims to show updates and to make the course more accessible to undergraduates who have a background in biology but have not completed biochemistry.

Key biochemistry concepts that help in understanding molecular biology will be integrated into the Bio 420 curriculum as needed to ensure students have the required background. Eliminating Biochemistry as a prerequisite will give students more flexibility, enable earlier enrollment, and better align the program with the needs of students preparing for health professions.

5. **Date of departmental approval:** 10/01/25