

# Biotechnology Program

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Dr. Leonard J. Sciorra, *Coordinator*

The Biotechnology Program is housed within the Department of Applied Science and Technology. The Department offers a major in Biotechnology with an emphasis on the biomedical aspects of Biotechnology. Student training is multidisciplinary, with course work in mathematics, biology, chemistry, physics as well as an internship at The Institute of Human and Molecular Genetics at UMDNJ-New Jersey Medical School.

## Requirements for Biotechnology Major

### Degree of Bachelor of Science

Twelve of the required credits for the major count towards the Core Curriculum Requirements.

BI-183	General Biology I (Core Natural Science)	3
BI-185	General Biology I Lab	1
BI-184	General Biology II (Core Natural Science)	3
BI-186	General Biology II Lab	1
CH-131	General Chem and Qualitative Analysis 1	3
CH-131L	Gen Chem and Qualitative Analysis 1 Lab	1
CH-132	General Chem and Qualitative Analysis 2	3
CH-132L	Gen Chem and Qualitative Analysis 2 Lab	1
CH-251	Organic Chemistry I	3
CH-251L	Organic Chemistry I Lab	1
CH-252	Organic Chemistry II	3
CH-252L	Organic Chemistry II Lab	1
CH-442	Biochemistry I	3
CH-442L	Biochemistry 1 Lab	1
CH-443	Biochemistry II	3
CH-443L	Biochemistry II Lab	1
BC-390	Spec Topics: Biological Chem (Capstone)	3
BI-240	Cell and Molecular Biology	4
BI-240L	Cell & Molecular Bio Lab	0
BI-350	Genetics	4
BI-350L	Genetics Lab	0
BT-420	Biomedical Applications of DNA Tech	3
BT-429	Special Topics in Biotechnology	3
BT-440	Research in Biotechnology I	2
BT-441	Research in Biotechnology II	2
MA-143	Differential Calculus (Core Math)	4
MA-144	Integral Calculus (Core Math)	4
PC-185	General Physics I	3
PC-187	General Physics Laboratory I	1
PC-186	General Physics II	3
PC-188	General Physics Laboratory II	1
Total Credits		69

### Special Note on the Core Requirements for Biotechnology Majors

<sup>1</sup> The recommended values course is PL-254 Contemporary Issues in Bioethics.

## **Special Note on Requirements Biotechnology Major Requirements**

- <sup>1</sup> Students are strongly encouraged to take MA-273 Multivariable Calculus I followed by CH-365 Physical Chemistry I.