## BIOTECHNOLOGY - CERTIFICATE



## **BIOT**

CCRI's Biotechnology program includes courses in biotechnology. microbiology, chemical technology and instrumentation. Coursework is designed to mirror many of the concepts and techniques used in biotechnology and related industries. In addition to coursework, students will have access to industry professionals through classroom speakers, manufacturing facility tours, industry seminars and professional networking. The Biotechnology program offers hands-on, competencybased instruction designed for entry-level students or retraining for individuals with previous workplace and/or educational experience. The 18-credit certificate program focuses on the techniques and skills leading companies look for in the area of biomanufacturing. Biotechnology certificate credits can be used toward the completion of the Science track leading to an Associate in Science (A.S.) degree. This allows students the option of working in the biotechnology field while completing their degree. Alternatively, students can complete the Associate in Science degree and the Biotechnology certificate program concurrently.

For more information, see the "Science" track entry (https://catalog.ccri.edu/programs-study/science/science-as/)in the catalog or contact Program Coordinator Scott Warila at 401-825-2136 or srwarila@ccri.edu. Additional information is available through the Biology Department on the CCRI website. (https://www.ccri.edu/biology/)

**Note:** Students are required to receive a grade of C or better in the courses required for the Biotechnology certificate or obtain special permission from the program coordinator. Many courses require prerequisites, corequisites and/or testing. See course descriptions for details. (https://catalog.ccri.edu/course-descriptions/)

## **Certificate Requirements**

Code	Title	Hours
BIOL 1300	Orientation to Biotechnology	1
BIOL 1000	Cell Biology for Technology	4
CHMT 1121	Chemistry for Biotechnology	3
BIOL 1310	Introduction to Biotechnology Laboratory Skills	3
BIOL 2480	General Microbiology	4
INST 1010	Introduction to Instrumentation Technology	3
Subtotal		18
Total Hours		18

## **Recommended Course Sequence**

Course	Title	Hours
Semester 1		
BIOL 1000	Cell Biology for Technology <sup>1</sup>	4
INST 1010	Introduction to Instrumentation Technology	3
	Hours	7
Semester 2		
CHMT 1121	Chemistry for Biotechnology <sup>2</sup>	3
INST 1010 Semester 2	Introduction to Instrumentation Technology  Hours	3

	Total Hours	18
	Hours	5
BIOL 2480	General Microbiology	4
BIOL 1300	Orientation to Biotechnology <sup>1</sup>	1
<b>Summer Session</b>		
	Hours	6
BIOL 1310	Introduction to Biotechnology Laboratory Skills	3

<sup>1</sup> Also offered in spring

<sup>&</sup>lt;sup>2</sup> Offered some summers