

BIOTECHNOLOGY (BTEC)

BTEC 120 **4.0 UNITS****Introduction to Biotechnology**

Class Hours: 2.0 Lecture / 6.0 Laboratory

Total Contact Hours: 36 Lecture / 108 Laboratory

Recommendation: Courses taught at the level of Introduction to College Composition with a grade of "C" or higher or "Pass" or equivalent or appropriate placement based on the college's multiple measures process with eligibility for ENG 100 or ENGL 100S.

This introductory course is designed for students interested in understanding the history, applications, and basic biochemical concepts and techniques used in biotechnology laboratories. Emphasis will be placed on the impact of biotechnology in society and preparing students for careers in biotechnology.

Transfer Credit: CSU; UC

C-ID: BIOT 150X

BTEC 150 **4.0 UNITS****Biomanufacturing Fundamentals**

Class Hours: 2.0 Lecture / 6.0 Laboratory

Total Contact Hours: 36 Lecture / 108 Laboratory

Prerequisite: BTEC120 with a grade of "C" or higher or equivalent, and MATH80 or MATH 80B or equivalent with a grade of "C" or higher or "Pass" or completion of the math assessment/placement process with a score eligible for Math courses numbered 100 or higher or appropriate placement based on AB705 mandates.

Prerequisite: BTEC120 with a grade of "C" or higher or equivalent and courses taught at the level of Intermediate Algebra with a grade of "C" or higher or "Pass" or equivalent or appropriate placement based on the college's multiple measures process. Concepts and techniques in biotechnology will be discussed, with a focus on biomanufacturing.

Topics include biomanufacturing products, regulation, facilities, quality control, and protein production, separation, purification, and analysis.

This course aims to provide students the skills and training necessary for a job in the biomanufacturing industry.

Transfer Credit: CSU

BTEC 180 **3.0 UNITS****Quality and Regulatory Affairs in Biotechnology**

Class Hours: 3.0 Lecture

Total Contact Hours: 54 Lecture

This course introduces concepts in regulation and quality in the biotechnology industry that influence the discovery, development and production phases of new product development. The role of government oversight and regulation in ensuring standards for product development are met is discussed.

Transfer Credit: CSU