



Biological Laboratory Techniques C.C.

Curriculum Code: 1608

Effective: Fall 2021 – Summer 2026

Description

The Biological Laboratory Techniques certificate is a laboratory-intensive curriculum which emphasizes the wide-ranging applications of recombinant DNA technology (genetic engineering) including the preparation of purified DNA, Polymerase Chain Reaction, and DNA "fingerprinting". Graduates will be able to work in many areas of biotechnology, such as human genetic disease research, improvement of disease-resistance in plants, enhanced crop production, pharmaceutical research, biological cleanup of environmental pollution, forensic science, or genome sequencing projects. If you plan to transfer to a four-year school, please see an academic advisor before enrolling. Not all courses in this program transfer to all colleges. Students planning to transfer should see an academic advisor before enrolling in any course. This certificate program is designed for students interested in molecular biology, biochemistry, genetics, biotechnology, and forensic technologies, and is used to supplement and strengthen S.T.E.M. laboratory skills in other degree programs.

Additional Information

BIOL 275 is only offered during Fall semester; BIOL 276 and ISCI 245 are only offered during Spring semester.

Contact Information

Contact the Science Department, Arts and Sciences Building, Room 3203, telephone number 517-483-1092, or the Academic Advising Center, Gannon Building – StarZone, telephone number 517-483-1904.

Program of Study Required Courses

Course Code	Course Title	Credit / Billing Hours
BIOL 127	Cell Biology	4 / 6
BIOL 203	Microbiology	3 / 3
BIOL 204	Microbiology Laboratory	1 / 3
BIOL 275	Molecular Biology I	4 / 6
BIOL 276	Molecular Biology II	4 / 6
CHEM 151	General Chemistry Lecture I	4 / 4
CHEM 161	General Chemistry Lab I	1 / 3
ISCI 245	S.T.E.M. Workplace Practices	4 / 6

Total Credit Hours

25 credits / 37 billing hours

Recommended Course Sequence

Semester I	Semester II (Fall)
BIOL 127 CHEM 151 CHEM 161	BIOL 203 BIOL 204 BIOL 275

Semester III (Spring)
BIOL 276 ISCI 245