

Cleveland State University
College of Health
Associate of Applied Science: Biotechnology Science Pathway to Bachelor of Science in Health Sciences

SUGGESTED SEQUENCE AT LAKELAND	
First Semester	Credits
BIOS 1050 Introduction to Biotechnology Science	3
BIOS 1200 Biotechnology Science Lab Skills	4
BIOL 1510 Principles of Biology I	4
CHEM 1500 General Chemistry I	5
FYEX 1000 First Year Experience	1
Semester Total	17
Second Semester	Credits
BIO S1500 Introduction to Biochemistry	4
BIOL 2700 Microbiology	4
CHEM 1600 General Chemistry II	5
ENGL 1110 English Composition I	3
Semester Total	16
Summer Semester	Credits
BIOS 1600 Advanced Molecular Separations	4
BIOS 2100 Applied Microbiology	3
Semester Total	7
Third Semester	Credits
BIOS 2500 Recombinant DNA Technology	4
BIOS 2600 Bioscience Manufacturing Processes	4
MATH 1550 Statistics	4
Semester Total	12
Fourth Semester	Credits
BIOS 2550 Introduction to Bioinformatics	1
BIOS 2800 Biotechnology Science Seminar	2
COMM 1050 Fundamentals of Public Speaking	3
BIOS 2400 Tissue Culture (1 st 8 weeks)	3
BIOS 2700 Internship (2 nd 8 weeks)	3
Semester Total	13
Associate of Applied Science Degree Awarded	65

Honors courses are acceptable where available

Pre-requisites: College-ready in Math and English.

2 years of the same foreign language completed in high school

Students who do not meet these pre-requisites may need to complete additional credits.

*Once an associate degree is earned, additional courses taken at Lakeland may not be eligible for financial aid. Please see Financial Aid for details.

CSU requires a minimum of 120 total credit hours for graduation. At least 30 credits must be completed in-residence at CSU. At least 24 of the in-residence credits must be completed at the upper division (300/400) level. Students deficient in total credits or in-residence must take additional elective credits to meet the minimum requirements. Depending upon other elective choices made, students may not need as many general electives as indicated above or may need additional electives.

CSU DEGREE REQUIREMENTS	
<i>*Courses to be taken through CSU or Lakeland</i>	Credits
ENG 102 College Writing II (ENGL 1120 at LCC)	3
HSC 203 Medical Terminology (HLTH 1215 at LCC)	1
**Math	3
**Social Science (SS must be from different subject areas)	3
**Social Science (SS must be from different subject areas)	3
**Arts and Humanities (Cannot be from PHL)	3
General Elective	3
General Elective	3
General Elective	3
Total	25
MUST BE TAKEN THROUGH CSU	
First Semester	Credits
PHL 240 Health Care Ethics	3
HSC 305 Culture and Health Care	3
Area of Emphasis Elective	3
Area of Emphasis Elective	3
Writing Across the Curriculum	3
Semester Total	15
Second Semester	Credits
Health Sciences Capstone	3
Writing Across the Curriculum-within major	3
Area of Emphasis Elective	3
Upper Division Elective	3
Upper Division Elective	3
HSC 499 Exit Evaluation	0
Semester Total	15
Bachelor of Science in Health Science Awarded	120

** Refer to the transfer guide for Lakeland options:

<https://www.csuohio.edu/transfer-guides/lakelandcc-health>

A grade of C or higher is required in English Composition courses and all Health Science major requirements.

This map represents one example of how to complete the AAS and BSHS degrees. Students should work closely with counselors/advisors at both institutions to discuss options.

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