Iowa Lakes Community College to ISU transfer guide for Microbiology BS Courses to be completed at Iowa Lakes Courses to be completed at ISU for 2021-2022 catalog

Strongly recommended	English, Math & Science Courses		<u>Microbiology</u>		
ENG 105 & 106	Composition 1 & 2	6	Micro 110	Orientation in Micro	1
BIO 112 & 113	General Biology 1 & 2	8	Micro 302, L	Biology of Microorganisms ²	4
CHM 166, 166 Lab & CHM 176 ¹	General Chemistry 1 & 2	9	Micro 310, L	Medical Micro with Lab	4
CHM 263, 263 Lab & CHM 273 ¹	Organic Chemistry 1 & 2	8	Micro 320	Molecular and Cellular Bacteriology	4
MAT 156 or 157	Statistics	3 or 4	Environmental Micro	430 Micro Diversity & Ecology OR	
MAT 127	College Algebra & Trig	5		456 Mycology OR	3
MAT 211	Calculus 1	5		477 Bacterial-Plant Interactions	
PHYS 162 & 172	College Physics 1 & 2	10	Micro 440	Microbial Physiology, Div., & Genetics Lab	4
SPC 112	Public Speaking	3	Micro 450	Microbiology Seminar	2
			Micro 451	Microbiology Senior Survey	R
General Education			Micro electives	Micro Choices	9
Humanities – Pick 1					
HIS 110	Western Civilization: Ancient to Modern	3	<u>Biochemistry</u>	(Minimum 3 credits)	
HIS 111	Western Civilization: Modern to Present	3	BBMB 301 or	Survey Biochemistry	3
HIS 151	US History to 1877	3	BBMB 336 or	Principles of Biochemistry	3
HIS 152	US History since 1877	3	BBMB 404 and 405	Biochemistry 1 & 2	6
MUS 100	Music Appreciation	3			
PHI 101	Introduction to Philosophy	3	Biological Sciences		
REL 101	Survey of World Religions	3	Bio 313, L	Genetics with Lab	4
			Bio 314 or 328	Molecular Biology	3
Ethics					
PHI 105	Introduction to Ethics	3	English – Pick 1 course		
			Engl 302	Business Communications	3
Social Science – Pick 1			Engl 309	Proposal and Report Writing	3
ANT 105	Cultural Anthropology	3	Engl 312	Biological Communications	3
CRJ 100	Introduction to Criminal Justice	3	Engl 314	Technical Communications	3
ECN 120	Principles of Macroeconomics	3			
ECN 130	Principles of Microeconomics	3	Personal Development		
POL 111	American National Government	3	Int'l Perspective		3
PSY 121	Developmental Psychology	3	US Diversity		3
PSY 251	Social Psychology	3			
SOC 110	Introduction to Sociology	3	Electives		
SOC 120	Marriage and Family			To reach 128 total credits	s
	65 cr. Limit that can apply to BS				
Recommended Preparation					
Bio 186	Microbiology (Includes lab)	4			

¹Students intending to double major in Micro/Biochemistry or Micro/Genetics should take Mat 211 and Mat 217 and CHM 176 Lab and CHM 273 Lab at ILCC

The Course numbers may vary somewhat from school to school. Double check the ISU Course Equivalency guides

(http://www.admissions.iastate.edu/equiv/index.php?state=iowa)

²Bio 186 lab at Iowa Lakes counts as Micro 302 Lab at ISU. If the Bio 186 lab was not in person, then we recommend taking Micro 302 Lab at ISU.