

FERRIS STATE UNIVERSITY

Biotechnology B.S. Degree

LANSING COMMUNITY COLLEGE

Articulation Agreement

THIS PROGRAM IS DESIGNED AS A B.S. DEGREE OPTION FOR STUDENTS WHO HAVE COMPLETED OR ARE COMPLETING ONE OF THE FOLLOWING LANSING COMMUNITY COLLEGE DEGREES:
AAS in BIOLOGY, AAS in CHEMICAL TECHNOLOGY, AAS in MOLECULAR BIOTECHNOLOGY

Application Deadlines:

1. Transfer students must be admitted 21 days prior to the first day of the semester they plan to attend.

Admission Requirements:

1. Transfer students must have at least 12 credits **at the time of application** with a minimum 2.0 overall GPA including an English and mathematics course or they will be considered first year students and must meet freshman admission criteria.

General Education Requirements:

1. Upon completion of the General Education courses outlined below, students will have completed MACRAO
2. Students must have the MACRAO Stamp on their college transcript in order to qualify for having met MACRAO
3. Students having completed MACRAO will be required to complete one of the 300-Level Advanced English courses listed below
4. Students not completing MACRAO must complete the Ferris General Education requirements with a 2.0 cumulative GPA
5. To view the Ferris General Education requirements, go to: <http://www.ferris.edu/HTMLS/academics/gened/gened.html>

Graduation Requirements:

1. 2.0 cumulative GPA in all courses. No grade lower than C- in science and math courses allowed for graduation
2. 30 minimum FSU semester hours must be completed to fulfill Ferris residency requirements
3. A total of 121 credit hours are required for graduation in this major

GENERAL EDUCATION REQUIREMENTS

FERRIS Courses	Course Title	LANSING CC Courses	Credit Hours Required	Grade
ENGL 150	English 1	WRIT 121 or WRIT 131	3	
ENGL 250	English 2	ENGL 122 or WRIT 122 or WRIT 132	3	
Advanced ENGL 300-Level	Advanced Composition (ENGL 321 or ENGL 323 or ENGL 325)		3	
Lab Science	Met through Major	LCC	4-5	
MATH 115	Intermediate Algebra	MATH 121	4	
Gen-Ed Elective	Cultural Enrichment/MACRAO Humanities	SPCH 130 or SPCH 140	3	
Gen-Ed Elective	Cultural Enrichment/MACRAO Humanities	LCC	3	
Gen-Ed Elective	Cultural Enrichment/MACRAO Humanities	LCC	3	
Gen-Ed Elective	Social Awareness/MACRAO Social Science	LCC	3-4	
Gen-Ed Elective	Social Awareness/MACRAO Social Science	LCC	3-4	
Gen-Ed Elective	Social Awareness/MACRAO Social Science	LCC	3-0	
TOTAL GENERAL EDUCATION Credits:			34- 36 with MACRAO	

BIOTECHNOLOGY MAJOR REQUIREMENTS

LANSING COMMUNITY COLLEGE

For questions about your transfer to Ferris-Big Rapids in the Biotechnology BS degree, contact:

PROGRAM COORDINATOR

Bradley J. Isler, Ph.D.

Assistant Professor of Biology

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APRIL 2007

		<i>Botany Zoology</i>				
BIOL Or BIOL BIOL	205 321 322	Human Anatomy/Physiology (CHEM 114) or Human Physiology & Anatomy 1 (BIOL 122 & CHEM 122) Human Physiology & Anatomy 2 (BIOL 321)	BIOL 201 & BIOL 202	5		
BIOL	375	Principles of Genetics (BIOL 122 and a BIO/CHEM course)				
BIOL	386	Microbiology & Immunology (BIOL 205/322 & a BIO/CHEM course)				
BIOL	388	Advanced Immunology Laboratory (BIOL 386)				
BIOL	470	Molecular Genetics (CHEM 364 and BIOL 375)				
BIOL	471	Biotech 2: Recombinant DNA Lab (BIOL 470)				
BIOL	472	Proteins (BIOL 122 and CHEM 364)				
BIOL	473	Biotech 3: Proteins Laboratory (CHEM 364 & BIOL 472)				
BIOL	474	Advanced Cell & Molecular Biology (CHEM 364 & BIOL 375)				
BIOL	475	Bioinformatics (BIOL 375)				
CHEM	121	General Chemistry 1 (MATH 115 and prior CHEM)	CHEM 151 & CHEM 161	5		
CHEM	122	General Chemistry 2 (CHEM 121)	CHEM 152 & CHEM 162	5		
CHEM	231	Quantitative Analysis (CHEM 122)		4		
CHEM	321	Organic Chemistry 1 (CHEM 122)	CHEM 251 & CHEM 272	5		
CHEM	322	Organic Chemistry 2 (CHEM 321)	CHEM 252 & CHEM 272	5		
CHEM	332	Biochemistry Lab 1 (CHEM 322, corequisite = CHEM 364)				
CHEM	333	Biochemistry Lab 2 (CHEM 332)				
CHEM	364	Biochemistry (PHCH 320 is acceptable) (CHEM 322)				
CHEM	474	Advanced Biochemistry (CHEM 364)				
MATH	130	Advanced Algebra & Analytical Trigonometry (MATH 120 or placement)	MATH 126	5		
MATH	251	Statistics for the Life Sciences (MATH 130)	STAT 170	3		
PHYS	211	Introductory Physics 1 (MATH 120)	PHYS 221	4		
Choose One:						
BIOL	491	Biotechnology Internship (instructor consent)				
BIOL	497	Independent Studies in Biology (instructor consent)				
CHEM	497	Independent Studies in Chemistry (instructor consent)				
TOTAL CREDIT HOURS:		121				