

# ***BACHELOR OF SCIENCE IN BIOTECHNOLOGY***

## **FERRIS STATE UNIVERSITY/NORTHWESTERN MICHIGAN COLLEGE TRANSFER PLAN**

**PROGRAM COORDINATOR: DR. BRADLEY ISLER**

**OFFICE: ASC 2118 Phone: (231) 591-2641 E-Mail: islerb@Ferris.edu**

Admission requirement for transfer students:

1. Transfer students with fewer than 12 transferable credits at the time of application, must meet the current freshman admission criteria. The application will be considered for admission based upon the high school academic record.
2. Transfer students with 12 or more transferable credits at the time of application (including both English and Algebra) must have a minimum CGPA of 2.0. Students without an English and Algebra class will be required to submit an ACT/SAT score.

**Admission to the Junior Year Professional Sequence is competitive**

Graduation Requirements

1. 2.0 Cumulative Grade Average in all courses. No grade lower than a C- in science and math courses allowed for graduation
2. Minimum 123 Credits including general education requirements
3. Residency Requirements: 30 minimum FSU semester credits
4. Minimum 40 credits numbered 300 or higher

REQUIRED		COURSE TITLE – FOR PREREQUISITES, SEE FSU OR NMC CATALOG COURSE DESCRIPTIONS	FSU S.H.	NMC Equivalent	GRADE
<b>Major – 91 credit minimum - No grade lower than a C- allowed for graduation.</b>					
BIOL	121	General Biology 1	4		
BIOL	122	General Biology 2 (NWMC course sequence equals both FSU's BIOL121 & 122. All courses in sequence must be taken to receive credit.)	4	BIO115+ BIO116	
BIOL	205	Human Anatomy/Physiology	5	BIO227+ BIO228	
Or					
BIOL	321	Human Physiology and Anatomy 1	4		
And					
BIOL	322	Human Physiology and Anatomy 2	4		
BIOL	375	Principles of Genetics	3		
BIOL	386	Microbiology and Immunology	5		
BIOL	388	Advanced Immunology Laboratory	2		
BIOL	470	Molecular Genetics	4		
BIOL	471	Biotech 2: Recombinant DNA Lab	3		
BIOL	472	Proteins	3		
BIOL	473	Biotech 3: Proteins Laboratory	3		
BIOL	474	Advanced Cell & Molecular Biology	3		
BIOL	475	Bioinformatics	3		
CHEM	121	General Chemistry 1	5	CHM150+ CHM150R	
CHEM	122	General Chemistry 2	5	CHM151+ CHM151R	
CHEM	321	Organic Chemistry 1	5	CHM250	
CHEM	322	Organic Chemistry 2	5	CHM251	
CHEM	231	Quantitative Analysis	4		
CHEM	332	Biochemistry Lab 1	2		
CHEM	333	Biochemistry Lab 2	2		
CHEM	364	Biochemistry	4		
CHEM	474	Advanced Biochemistry	3		
MATH	130	Advanced Algebra & Analytical Trigonometry	4	MTH140	
MATH	251	Statistics for the Life Sciences	3		
PHYS	211	Introductory Physics 1	4	PHY121	
<b>CHOOSE ONE:</b>					
BIOL	491	Biotechnology Internship	3-6		
BIOL	496	Independent Studies in Biology	3-6		
CHEM	497	Independent Studies in Chemistry	3-6		

General Education: All Students must complete the General education associated with this degree. Some courses listed in the major program requirements also satisfy general education requirements. Listed below are general education requirements not satisfied in the programs major area.

FSU General Education requirements are available on the FSU web site at:

<http://www.ferris.edu/htmls.academics.gened/gened.html>.

Listings of FSU courses that will satisfy these requirements are available on the FSU web site at:

<http://www.ferris.edu/htmls.academics.gened/courses.html>.

Equivalencies for FSU courses at your school may be found on the FSU web site at:

<http://www.ferris.edu/admissions/Tranfer/WebPages/homepage1.cfm>

<b>Remaining General Education Requirements not fulfilled in the major: minimum 30 credits</b>					
ENGL	150	English 1	3	ENG111	
ENGL	250	English 2	3	ENG112	
ENGL	321	Advanced Composition	3		
COMM	105 or 121	Interpersonal Communication Fundamentals of Public Speaking	3	COM111	
		Cultural Enrichment Elective	3		
		Cultural Enrichment Elective	3		
		Cultural Enrichment Elective – 200 level or higher	3		
		Social Awareness Elective – Foundation	3		
		Social Awareness Elective – Second Subject Area	3		
		Social Awareness Elective – 200 level or higher	3		
		Race/Ethnicity/Gender – to be taken as one of the Cultural Enrichment or Social Awareness courses			
		Global Consciousness – to be taken as one of the Cultural Enrichment or Social Awareness courses			
<b>Electives to the minimum 123 credits requires for the degree</b>					