



**Transfer Guide for  
NORTHWESTERN MICHIGAN COLLEGE  
Bachelor of Science Degree  
BIOLOGY EDUCATION**

**Home Page**

<http://www.ferris.edu/htmls/colleges/educatio/index.cfm>

**Contact**

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231-591-3646

*This is a guide for students who plan to transfer to Ferris State University. This guide is not intended to be a contract with Ferris. The information on this guide is subject to change; students should contact Ferris to keep informed of changes (see "contact" above). Final responsibility for verifying all transfer information lies with the student.*

**ADMISSION REQUIREMENTS FOR TRANSFER STUDENTS**

Admission to biology education requires a minimum 2.00 college grade point average and can be entered any semester. If a student has completed college intermediate algebra and the first two semester of college English, successfully completing the State Basic Skills Test before entering the program would be advisable [www.mttc.nesinc.com](http://www.mttc.nesinc.com)

For assistance with the admission process, contact your transfer counselor at the community college or the transfer admissions officer at Ferris State University, Shari Chamberlain, at 1-800-4-FERRIS, [chambers@ferris.edu](mailto:chambers@ferris.edu).

**APPLICATION DEADLINE**

Transfer students must be admitted (apply & be accepted) 21 days prior to the first day of the semester they plan to attend.

**TRANSFER PLAN**

Transfer of credit is awarded on a course-by-course basis.

Transferable courses are those with grades of "C" (2.00 on a 4.00 scale) or better.

The following is a list of courses students must complete for the biology major. However, secondary education requires a minor as well (an additional 20-27 credits). Please contact the educational counselor for assistance with minor choices. Community college equivalents are listed below and may be taken prior to transferring to Ferris. Blank spaces in the community college column indicate there are no course equivalents available.

**FERRIS STATE UNIVERSITY/NORTHWESTERN MICHIGAN COLLEGE**  
**TRANSFER PLAN**  
**BIOLOGY EDUCATION**

NAME: \_\_\_\_\_ SS#: \_\_\_\_\_

REQUIRED		COMMUNICATION COMPETENCE - 12 Credit Hours Required:	NMC	FSU S.H.	GRADE
ENGL	150	English 1 (EN 101-Must obtain a minimum of B grade for English teaching major/minor)	ENG 111 OR 111A	3	
ENGL	250	English 2 (EN 102-Must obtain a minimum of B grade for English teaching major/minor)	ENG 112	3	
COMM		Inter. Comm. - COMM 105 or Fund. of Public Speaking - COMM 121 Program Specific Requirement	COM 111	3	
ENGL	321	Advanced Composition		3	
<b>SCIENTIFIC UNDERSTANDING - 7-8 Credit Hours Required:</b> Two courses from the following subject areas (one must be a lab course): ASTR, BIOL, CHEM, GEOG 11, GEOG 121, GEOL, PHSC.					
PHYS	130	Concepts in Physics	PHY 105	4	
<b>OR</b>		(If you select PHYS 211, you must complete PHYS 212 also.			
PHYS	211	Introductory Physics 1	PHY 121	4	
PHYS	212	Introductory Physics 2	PHY 122	4	
<b>QUANTITATIVE SKILLS - Proficiency in MATH 115 or higher:</b> This requirement can be completed by <b>ONE</b> of the following options: 1. Pass MATH 115 or higher. 2. Pass course proficiency exam in MATH 115 or higher. 3. ACT Math subtest score of 24 or higher.					
			MTH 111	3	
<b>CULTURAL ENRICHMENT - 9 Credit Hours Required:</b> Three courses from the following subject areas: These courses must include: 1. At least one course at the 200 level or higher. 2. No more than 5 credit hours in music activities courses, or theater activities courses, or art studio courses may be used to complete this requirement. Art, History, Humanities, Philosophy (EXCEPT LOGIC), Literature, Music, Drams, Foreign Language					
		<a href="http://www.ferris.edu/htmls/academics/advising/Section7/homepage.htm">http://www.ferris.edu/htmls/academics/advising/Section7/homepage.htm</a>			
		<a href="http://www.ferris.edu/admissions/Transfer/WebPages/homepage1.cfm">http://www.ferris.edu/admissions/Transfer/WebPages/homepage1.cfm</a>			
<b>SOCIAL AWARENESS - 9 Credit Hours Required:</b> Three courses from the following subject areas: These courses must include: 1. Courses in at least two different subject areas. 2. One Social Awareness Foundations Course. 3. One course dealing with issues of race/ethnicity and/or gender. 4. One course at the 200 level or higher. Anthropology, Economics, Political Science, or Sociology.					
		<a href="http://www.ferris.edu/htmls/academics/advising/Section7/homepage.htm">http://www.ferris.edu/htmls/academics/advising/Section7/homepage.htm</a>			
		<a href="http://www.ferris.edu/admissions/Transfer/WebPages/homepage1.cfm">http://www.ferris.edu/admissions/Transfer/WebPages/homepage1.cfm</a>			
<b>GLOBAL CONSCIOUSNESS:</b> Each student must complete one course from the Global Consciousness group, which may also count toward fulfilling the Cultural Enrichment or Social Awareness requirement, respectively. Global Consciousness courses deal specifically with contemporary cultures, languages, and societies outside North America.					
		<a href="http://www.ferris.edu/htmls/academics/advising/Section7/homepage.htm">http://www.ferris.edu/htmls/academics/advising/Section7/homepage.htm</a>			
		<a href="http://www.ferris.edu/admissions/Transfer/WebPages/homepage1.cfm">http://www.ferris.edu/admissions/Transfer/WebPages/homepage1.cfm</a>			
<b>RACE/ETHNICITY/GENDER: Choose one Race/Ethnicity/Gender course.</b>					
		<a href="http://www.ferris.edu/htmls/academics/gened/regcourses.html">http://www.ferris.edu/htmls/academics/gened/regcourses.html</a>			
		<a href="http://www.ferris.edu/admissions/Transfer/WebPages/equivalencies.htm">http://www.ferris.edu/admissions/Transfer/WebPages/equivalencies.htm</a>			

Note: Though faculty advisors are responsible for advising students regarding degree requirements, it is the student who is ultimately responsible for choosing the correct courses and for following the correct program.

**The University Associate Degree policy will not apply to this program. The MACRAO policy may have little or no effect due to programmatic requirements.**

**FERRIS STATE UNIVERSITY/NORTHWESTERN MICHIGAN COLLEGE**

**College of Education and Human Services**

**BIOLOGY TEACHING MAJOR - 41-42 Semester Hours**

You can **NOT** have a Biology teaching minor with this teaching major.

REQUIRED		COURSE TITLE	NMC	FSU S.H.	GRADE
BIOL	121	General Biology 1	BIO 115 & 116 (MUST HAVE BOTH)	4	
BIOL	122	General Biology 2		4	
BIOL	205	Human Anatomy and Physiology	BIO 227 & 228	5	
BIOL	218	Microbial Ecology		3	
BIOL	341	Natural History of Invertebrates		3	
BIOL	342	Vertebrate Natural History	BIO 250	3	
BIOL	351	Field Botany		3	
BIOL	353	Plant Physiology		4	
BIOL	375	Principles of Genetics		3	
BIOL	442	Ecology	BIO 260	3	
		TOTAL		35	
<b>RELATED REQUIREMENT - 3 HOURS REQUIRED</b>					
CHEM	124	Introduction to Organic and Biochemistry		3	
<b>RECOMMENDED ELECTIVES - 3-4 HOURS REQUIRED</b>					
BIOL	340	Evolution		3	
BIOL	344	Entomology		3	
BIOL	347	Environmental Conservation		3	
BIOL	349	Medical Parasitology		3	
BIOL	370	Developmental Biology		4	
BIOL	373	Cell Biology		3	
<b>NOTE: A 2.50 GPA IS REQUIRED IN THE MAJOR/MINOR. A MINIMUM OF A "C" GRADE IS REQUIRED FOR ALL COURSES.</b>					

Note: Though faculty advisors are responsible for advising students regarding degree requirements, it is the student who is ultimately responsible for choosing the correct courses and for following the correct program.

**IN ADDITION TO AN EDUCATION MAJOR, AN EDUCATION MINOR IS REQUIRED FOR THE COMPLETION OF THE DEGREE. IF YOU HAVE QUESTIONS, PLEASE CONTACT THE EDUCATIONAL COUNSELOR FOR ASSISTANCE. EMAIL: [CLINEMA@FERRIS.EDU](mailto:CLINEMA@FERRIS.EDU) OR TELEPHONE (231) 591-3646 OR 1-800-4-FERRIS EXTENSION 3646.**

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**FERRIS STATE UNIVERSITY/NORTHWESTERN MICHIGAN COLLEGE**  
**COLLEGE OF EDUCATION AND HUMAN SERVICES**  
**SECONDARY EDUCATION**  
**PROFESSIONAL SEQUENCE**

Admission to the **Technical** curriculum requires the completion of one of the following:

1. An A.A.S. Degree with at least 40 semester hours in the occupational major and a minimum grade point average of 2.50 in the major courses **OR**
2. Occupational competence documented by the Michigan Occupational Competency Assessment Center (MOCAC)

**NOTE: STUDENTS MUST OBTAIN THE APPROPRIATE GPA FOR THEIR MAJOR/MINOR AS ESTABLISHED BY EACH DEPARTMENT. A 2.75 GPA IS REQUIRED IN THE PROFESSIONAL EDUCATION COURSE SEQUENCE. A 2.50 CUMULATIVE GPA IS ALSO REQUIRED BEFORE STUDENT TEACHING.**

**FIELD EXPERIENCE REQUIREMENT: (for vocational majors only: Technical, Business, Marketing)** Two years of wage earning occupational work experience (within the last six (6) years) required. **Contact the Vocational Authorization Officer immediately.**

\*Possible options are available if you have at least one-year of experience (check with Vocational Authorization Officer).

REQUIRED	PROFESSIONAL EDUCATION COURSES (33-39 Credit Hours Required)		S.H.	NMC	GRADE
<b>Level I Courses</b>					
EDUC	101	Introduction to the Profession of Teaching	1		
EDUC	251	Life Span Human Growth & Development	3		
EDUC	289	Principles of Teaching & Learning	3		
<i>NOTE: Prior to enrolling in any Level II or Level III course, all students in teacher education programs must pass all sections of the state-mandated Basic Skills Test and complete a level II application.</i>					
<b>Level II Courses</b>					
EDUC	303	School, Work, and Society	3		
EDUC	338	Secondary General Methods I (Application Required)	4		
EDUC	415	Teaching Strategies for Special Education and Diverse Populations (prerequisite: EDUC 338)	3		
EDUC	438	Secondary General Methods II (Application Required)	5		
EDUC	443	Teaching Reading/Secondary Areas	3		
<i>The next course is required for vocational majors only ( Technical, Business, Marketing)</i>					
EDUC	400	Foundations in Career and Technical Education	3		
<b>Level III Courses</b>					
EDUC	491	Secondary Directed Teaching (Application Required)	6-12		
EDUC	499	Professional Seminar	2		
		TOTAL	33-39		

Students are strongly encouraged to meet with their advisor to discuss the appropriate sequence of courses for their program and any conflicts with other courses. No Grade Lower than a C.

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