

## Muskegon Community College Transfer Guide

The Bachelor of Science in Biology (Pre-Optometry) is designed to prepare students for admission into professional programs in optometry. The requirements of the Pre-Optometry program are based on the general requirements of the Bachelor of Science in Biology, specifically adjusted for pre-optometry students. Coursework in human anatomy and physiology, microbiology, genetics, developmental biology, cell biology, inorganic and organic chemistry, biochemistry, and physics prepares students for the Optometry Admission Test (OAT) and for future success in the field.

The Pre-Optometry program stresses a foundation of chemistry, biology, physics and mathematics to meet the requirements of the Michigan College of Optometry at Ferris State University. The Michigan College of Optometry (MCO) prefers to accept applicants who have completed a bachelor's degree. However, MCO does accept applications from candidates who have not earned a bachelor's degree but have completed the minimum admissions requirements, which are indicated on the program checksheet. Admissions requirements for other schools of optometry may vary, and the pre-optometry program can be modified for individual students to ensure that those requirements are met. Superior academic preparation and awareness of optometry as a profession are important factors in admission to any school of optometry.

### General Admission Criteria

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 must provide their high school records and ACT /SAT scores for admission review. Official transcripts from all accredited colleges/universities must be submitted with the Ferris application.

### Course Requirements

#### Muskegon Community College

| Course      | Ferris Equiv. | Ferris Course Title  | Cr. Hrs. |
|-------------|---------------|--|----------|
| ENG 101     | ENGL 150      | English 1  | 3        |
| ENG 102     | ENGL 250      | English 2  | 3        |
| COM 201     | COMM 121      | Fundamentals of Public Speaking                                  | 3        |
| PSYC 201    | PSYC 150      | Introduction to Psychology                                       | 3        |
| MATH 161    | MATH 220      | Analytical Geometry-Calculus 1                                   | 4        |
| MATH 115    | MATH 251      | Statistics for the Life Sciences                                 | 3        |
| BIOL 103    | BIOL 121      | General Biology 1  | 8        |
| <b>and</b>  | <b>and</b>    | <b>and</b>   |          |
| BIOL 104    | BIOL 122      | General Biology 2  |          |
| BIOL 105    | BIOL 205      | Human Anatomy & Physiology                                       | 5        |
| <b>and</b>  |               |  |          |
| BIOL 106    |               |  |          |
| BIOL 207    | BIOL 286      | Microbiology   | 3        |
| <b>and</b>  |               |  |          |
| BIOL 207A   |               |  |          |
| CHEM 101    | CHEM 121      | General Chemistry 1  | 5        |
| <b>and</b>  |               |  |          |
| CHEM 101A   |               |  |          |
| CHEM 102    | CHEM 122      | General Chemistry 2  | 5        |
| <b>and</b>  |               |  |          |
| CHEM 102A   |               |  |          |
| CHEM 201E   | CHEM 321      | Organic Chemistry 1  | 5        |
| <b>and</b>  |               |  |          |
| CHEM 201F   |               |  |          |
| CHEM 202F   | CHEM 322      | Organic Chemistry 2  | 5        |
| <b>and</b>  |               |  |          |
| CHEM 202G   |               |  |          |
| PHYS 201    | PHYS 211      | Introductory Physics 1   | 4        |
| PHYS 202    | PHYS 212      | Introductory Physics 2   | 4        |
| Muskegon CC | VARIABLES     | Cultural Enrichment Electives<br>(one must be at FSU 200+ level) | 9        |

#### Ferris State University

| Course    | Ferris Course Title                | Cr. Hrs. |
|-----------|------------------------------------|----------|
| ENGL 311  | Advanced Technical Writing         | 3        |
| <b>or</b> | <b>or</b>                          |          |
| ENGL 321  | Advanced Composition               |          |
| <b>or</b> | <b>or</b>                          |          |
| ENGL 323  | Proposal Writing                   |          |
| FSU       | Biology Elective (see FSU advisor) | 6        |
| BIOL 346  | Ecological Assessment              | 3        |
| <b>or</b> | <b>or</b>                          |          |
| BIOL 347  | Environmental Conservation         |          |
| <b>or</b> | <b>or</b>                          |          |
| BIOL 442  | Ecology                            |          |
| BIOL 370  | Developmental Biology              | 4        |
| BIOL 373  | Cell Biology                       | 3        |
| BIOL 375  | Principles of Genetics             | 3        |
| BIOL 460  | Current Topics in Biology          | 2        |
| CHEM 324  | Fundamentals of Biochemistry       | 3-4      |
| <b>or</b> | <b>or</b>                          |          |
| CHEM 364  | Biochemistry                       |          |

**Credits Required for Degree 121**

### Contact Information

**Big Rapids Campus**

**College of Arts & Sciences**

<http://www.ferris.edu/HTMLS/colleges/>

Jenice Winowiecki, Biology Advisor  
(231) 591-2555 or wino2@ferris.edu

[www.ferris.edu/transferservices](http://www.ferris.edu/transferservices)

|                           |   |   |
|---------------------------|---|---|
| <i>Muskegon CC VARIES</i> | Social Awareness Electives<br>(one must be FSU 200+ level)<br>(must come from 2 different<br>subject areas) | 9 |
|---------------------------|---|---|

*Students transferring to Ferris with the Michigan Transfer Agreement (MTA) and entering a degree program will have met a 30-hour block of lower-level general education courses. However, this does not exempt students from completing program specific prerequisites or higher-level general education course requirements. Students should contact their advisor regarding classes that meet the MTA.*

## Delivery Locations

This degree and the Ferris courses are offered at the following locations:

- Ferris State University, Big Rapids Campus, Big Rapids MI
- Select courses may be delivered online and/or in a mixed delivery format (i.e. a mix of online and face-to-face instruction at the Ferris Main Campus or at an off-campus location)

## Transfer Student Orientation

All new students to Ferris State University are required to complete an orientation. Orientation for incoming freshmen is a one-day session that occurs on campus and includes class registration. Eligible transfer students have the option of completing an online orientation or attending an on campus session.

## Advising Notes

It is recommended that potential students meet with an advisor to review the degree, course schedule, and have any questions answered prior to completing an application. **Students who are completing the MTA may have different general education course requirements for the particular degree selected. Meeting with a Ferris advisor prior to the selection of any electives or general education classes shown above could reduce the chance of completing a course that will not apply toward the selected degree.** Once admitted, students must continue to meet with an advisor as they work towards graduation.

## Online Learning

Orientation is required for students who register for an online *course* or are completing an online *degree*. Students must demonstrate competency in FerrisConnect skills. This may be done by taking a tutorial and quiz, or, for students who have already taken and passed online courses, they can submit a waiver request. Students should check with the department that offers the class to determine its particular needs and/or the Ferris advisor regarding registration for online course work.

## Michigan Transfer Agreement (MTA)

Ferris participates in the Michigan Transfer Agreement (MTA). This agreement will facilitate the transfer of general education requirements from one Michigan institution to another. Students may complete the MTA as part of a degree program or as a stand-alone package. The MTA consists of a minimum of 30 general education credit hours as identified by the college or university.

## Disclaimer

*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 their community college or Ferris to keep informed of changes. Final responsibility for verifying all transfer information lies with the student. Please refer to the effective and/or revised date on the bottom of the guide.*