

## **BIOLOGY MITRANSFER PATHWAY**

| Institution      | Grand Valley State University       |
|------------------|-------------------------------------|
| Degree/Program   | BS and BA in Biology (all programs) |
| Credits Required | 120                                 |

## **MICHIGAN TRANSFER AGREEMENT (MTA)**

The MiTransfer Pathways builds on the Michigan Transfer Agreement (MTA). The MTA allows transfer students to select designated courses to complete a minimum of 30 credit hours fulfilling MTA distribution requirements. Students following MiTransfer Pathway agreements should complete the MTA in accordance with the sending institutions' course designations and consider whether or not any recommended MiTransfer Pathways major-specific courses will "double count" to fulfill MTA distribution requirements in planning their transfer. Be aware that "double count" policies differ from institution to institution. More information about the MTA is available at <a href="https://www.mitransfer.org">www.mitransfer.org</a>.

The MTA Mathematics distribution area allows students to complete one of three math pathways. The Biology MiTransfer Pathways faculty recommended that students complete a course in the Calculus pathway.

## MITRANSFER PATHWAYS COURSES

These courses are commonly agreed upon for transfer in this program around the state among participating institutions.

| Pathway Course         | Subject/ Course Number | Course Title                     | Credit Hrs |
|------------------------|------------------------|----------------------------------|------------|
| Cell/Molecular Biology | BIO 120                | General Biology I with Lab       | 4          |
| Organismal Biology     | BIO 121                | General Biology II with Lab      | 4          |
| General Chemistry I    | CHM 115                | Principles of Chemistry I w/Lab  | 4          |
| General Chemistry II   | CHM 116                | Principles of Chemistry II w/Lab | 5          |
| Organic Chemistry I    | CHM 241                | *Organic Chemistry I             | 4          |
| Organic Chemistry II   | CHM 242                | *Organic Chemistry II            | 4          |
| TOTAL CREDITS          |                        |                                  | 26         |

<sup>\*</sup>GVSU Biology majors have two upper level chemistry sequences to choose from:

- CHM 231 (Introductory Organic Chemistry w/Lab) and CHM 232 (Introductory Biochemistry w/lab)
- · CHM 241 and 242 (Organic Chemistry I and II) for students interested in Pre-Medical, Pre-Vet, Pre-professional and Graduate School Programs

## REMAINING DEGREE REQUIREMENTS

These are required, recommended, or optional courses that transfer students could complete at a community college to fulfill degree requirements at the university/ receiving institution.

| General Education or Program Requirement                | Subject/ Course Number | Course Title                    | Credit<br>Hours |
|---|------------------------|---------------------------------|-----------------|
| Minimum required prerequisite for chemistry and physics | MTH 122                | **College Algebra               | 3               |
| Minimum required prerequisite for PHY 220               | MTH 123                | **Trigonometry                  | 3               |
| Math Cognate Option                                     | STA 215                | Introductory Applied Statistics | 3               |
| Required/Core Course                                    | BIO 215                | Ecology w/Lab                   | 4               |
| Required/Core Course                                    | BIO 210                | Evolutionary Biology            | 3               |
| Physics Option  | PHY 220                | ***General Physics I w/lab      | 5               |

| Physics Option | PHY 221 | ***General Physics II w/lab | 5 |
|----------------|---------|-----------------------------|---|
| TOTAL CREDITS  |         | 26                          |   |

- \*\*Math course selection will depend on required Chemistry and Physics options:
- · MTH 122 or MTH 125 or MTH 201 required for CHM 116
- · MTH 122 or MTH 201 required for PHY 200
- · MTH 122 (College Algebra) and MTH 123 (Trigonometry) (or placement test) required for PHY 220
- · MTH 201 (Calculus I) required for PHY 230
- MTH 202 (Calculus II) required for PHY 231
- · MTH 122 (College Algebra) and MTH 123 (Trigonometry) (or placement test) required for MTH 201 (Calculus I)
- \*\*\* GVSU Biology majors have three Physics sequences to choose from:
- PHY 200 (Physics for the Life Sciences w/lab)
- · PHY 220 and 221 (algebra-based Physics w/labs) for students interested in Pre-Medical, Pre-Vet, Pre-professional and Graduate School Programs
- · PHY 230 and 231 (calculus based Physics w/labs) for students interested in some select Pre-medical and Pre-professional programs. Students should consult university websites for program admission standards.