The following courses will fulfill requirements for the Associate in Science and Arts Degree. It is designed for students who plan to transfer to G.V.S.U. and major in Biology after completing the A.S.A. degree at M.C.C.

**REQUIRED FOUNDATIONAL SKILLS** – You must demonstrate a minimum level of achievement, either by successful testing or satisfactory course completion (a grade of “C” or better) in four areas:

<table>
<thead>
<tr>
<th>Area</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Writing</td>
<td>English 085, 089, 091 or 114</td>
</tr>
<tr>
<td>2. Reading</td>
<td>Reading 040A or 040C</td>
</tr>
<tr>
<td>3. Math</td>
<td>Mathematics 050 or 107 (or complete higher level course)</td>
</tr>
<tr>
<td>4. Computers</td>
<td>CIS 100 or any other CIS course (Consult a counselor regarding transferability. CIS 110 or 120A are strongly recommended.)</td>
</tr>
</tbody>
</table>

English, Reading and Mathematics Placement Tests may be required and are available in Testing Services, located in Room 134 – 777-0394. English and Reading placement tests may be waived if you show documentation or a proficiency level 1 or 2 on the high school MEAP or MME writing and reading tests or if you have an ACT composite score of 22 or greater. The Mathematics placement test may be waived if you show documentation of a score of 28 or above on the ACT Math test.

**GENERAL EDUCATION**

<table>
<thead>
<tr>
<th>Category</th>
<th>Minimum Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMUNICATION</td>
<td>English 101 and 102 English Composition 6</td>
</tr>
<tr>
<td>SCIENCE/MATH</td>
<td>Biology 103Lec &amp; 103A or 100 (10A,F,G,H) or (10A,F,G,E) Introductory Biology 4</td>
</tr>
<tr>
<td></td>
<td>Chemistry 101Lec &amp; 101A General &amp; Inorganic, Lec &amp; Lab 5</td>
</tr>
<tr>
<td></td>
<td>Chemistry Placement Test is required prior to taking Chemistry 101Lec &amp; 101A</td>
</tr>
<tr>
<td>THE HUMAN EXPERIENCE</td>
<td>3</td>
</tr>
<tr>
<td>AESTHETIC VALUES</td>
<td>Art 104, 105B (was 105), 107, 108, 109, 204B (was 204), 205, 207, 208, 209, 211</td>
</tr>
<tr>
<td></td>
<td>Dance 100, 101, 102, 106, 200, 201, 206, 213, 218</td>
</tr>
<tr>
<td></td>
<td>English 208 (or Communications 203), 223</td>
</tr>
<tr>
<td></td>
<td>Music – any 100 level or above course</td>
</tr>
<tr>
<td>ETHICS AND LOGIC</td>
<td>Philosophy 101, 102, 104, 202, 204, 205, 207 3</td>
</tr>
<tr>
<td>SOCIAL RELATIONSHIPS</td>
<td>Economics 101, 102, 130 3</td>
</tr>
<tr>
<td></td>
<td>Psychology 102, 201, 202, 203, 205A, 207, 208, 210 (same as Sociology 210)</td>
</tr>
<tr>
<td></td>
<td>Sociology 101, 102, 202, 203, 206, 210 (same as Psychology 210)</td>
</tr>
<tr>
<td></td>
<td>Women’s Studies 101</td>
</tr>
</tbody>
</table>

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**Muskegon Community College Curriculum Guide**

Curriculum: BIOLOGY – GRAND VALLEY STATE UNIVERSITY

Curriculum code: G04A

IT IS IMPORTANT TO SEE AN M.C.C. COUNSELOR EACH SEMESTER FOR ACADEMIC ADVISING. TO SCHEDULE AN APPOINTMENT CALL (231) 777-0362.
HUMAN CULTURES

WESTERN WORLD
- Art 198, 199, 202
- English 200, 201, 204, 205, 206, 210, 213, 225, 226, 227, 228
- History 101, *102, 204
- Humanities 195
- Music 103
- Political Science 203
- Theater 201

ANITERNATIONAL

Earn 3 credits from:
- History 201, 202, 207, 211
- Political Science 111, 205

INTERNATIONAL

If the credit hours from AMERICAN CULTURES and SOCIAL RELATIONSHIPS total less than 8 credits, the choices are:
- Anthropology 103, 110
- Geography 104 (was 102A, 102C), 105
- History 195
- Political Science 202, 211

If the credit hours from AMERICAN CULTURES and SOCIAL RELATIONSHIPS total 8 credits or more, then other options are:
- English 207, 211, 218
- French 101, 102, 201, 202
- German 101, 102, 201, 202
- History *210
- Philosophy 203, 210
- Spanish 101, 102, 201, 202

PHYSICAL EDUCATION

Choose one from: PEA 101A, 103, 104A, 118, or 201 and one PEA or DNC credit hour of choice.

CHOOSE FROM THE FOLLOWING FOR A TOTAL OF 62 CREDITS

G.V.S.U. BASIC SKILL REQUIREMENT

One course from: Mathematics 050, 109, 111, 112, 161
(or proficiency testing at G.V.S.U.)

ADDITIONAL G.V.S.U. GENERAL EDUCATION REQUIREMENTS

Choose one course from the following if not taken to fulfill a general education requirement:
- Anthropology 110; English 211; Foreign Language 202; Geography 105; Philosophy 210;
- Political Science 211

Choose one course from the following if not taken to fulfill a general education requirement:
- Anthropology 103; Sociology 102, 202

MAJOR RELATED COURSES

Chemistry 102 Lec & 102A General and Inorganic, Lec & Lab
- Chemistry 201E & 201F Organic, Lec & Lab (other option is available at G.V.S.U.)
- Chemistry 202F & 202G Organic, Lec & Lab (other option is available at G.V.S.U.)
- Biology 104 Lec & 104A or Biology 100 (10B,C,D,E) or (10B,C,D,J) or (10B,C,D,H) Introductory Biology
  (Biology 100 modules are no longer being offered.)
- Mathematics 115 Probability and Statistics (or Business 105)
  or
- Mathematics 151 Survey of Calculus
  or
- Mathematics 161 Calculus I
MINIMUM CREDITS

Physics 201L&L Principles of Physics, Lec & Lab (prerequisite: Math 112) 4
or (other option is available at G.V.S.U.)
Physics 203L&L Engineering Physics, Lec & Lab (prerequisite: Math161) 5
(Other option is available at G.V.S.U.)
Physics 202L&L Principles of Physics, Lec & Lab (rec. for grad. school or sec. ed.) 4
or
Physics 204L&L Engineering Physics, Lec & Lab (prereq.: Math 162) (rec. for grad. school or sec. ed.) 5

COGNATE REQUIREMENTS
B.A. – Foreign Language – third-semester proficiency 0-12
B.S. – Fulfilled with major requirements.

ELECTIVES variable

TOTAL 62

NOTES:

*G.V.S.U. awards the same equivalency credit for M.C.C.’s History 102 and 210. Students are advised not to take both courses at M.C.C. if they wish to transfer to G.V.S.U.

Transfer students are required to have a minimum transfer GPA of 2.5.

Students should check the M.C.C. catalog for course prerequisites.

It is recommended that Biology majors become familiar with the Biology section in the G.V.S.U. catalog; copies are available in Room 1106 in the Stevenson Center for Higher Education.

The information contained in this curriculum guide is accurate as of January 2011 and is subject to change by both institutions.