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

Muskegon Community College Curriculum Guide

Curriculum: COMPUTER SCIENCE – WESTERN MICHIGAN UNIVERSITY    Curriculum Code: W06

The following courses will fulfill requirements for the Associate in Science and Arts Degree. It is designed for students who plan to transfer to W.M.U. and major in Computer Science 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 of 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

COMMUNICATION

<table>
<thead>
<tr>
<th>Course</th>
<th>Minimum Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 101 and 102 English Composition</td>
<td>6</td>
</tr>
</tbody>
</table>

SCIENCE/MATH

Courses must be taken in more than one academic area. Must include at least 4 credits of lab science.

Lab Science options:
- Biology 100 (10A, B, C, D, E, F, G, H, J), 103Lec & 103A, 104Lec & 104A, 105Lec & 105C, 106Lec & 106A, 109, 110, 120, 122, 207Lec & 207A
- Geography 101A, 215
- Geology 101A, 102
- Physical Science 101A
- Physics 201L&L, 202L&L, 203L&L, 204L&L (Biology 100 modules are no longer being offered.)

Non-lab options:
- Anthropology 105
- Astronomy 101, 105A (same course as Physics 105A)
- Biology 200, 207 – lecture only
- Geography 101
- Mathematics 105, 107, 109, 111, 112, 115 (or Business 105), 151, 161, 162, 215, 274, 276, 283, 295
- Physics 105A (same course as Astronomy 105A)

!!! Chemistry Placement Test is required prior to taking Chemistry 101Lec & 101A.

THE HUMAN EXPERIENCE

AESTHETIC VALUES

<table>
<thead>
<tr>
<th>Course</th>
<th>Minimum Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 101, 104, 105B (was 105), 107, 108, 109, 204B (was 204), 205, 207, 208, 209, 211</td>
<td>3</td>
</tr>
<tr>
<td>Dance 100, 101, 106, 200, 201, 206, 213, 218</td>
<td></td>
</tr>
<tr>
<td>English 208 (or Communications 203), 223</td>
<td></td>
</tr>
<tr>
<td>Music – any 100 level or above course</td>
<td></td>
</tr>
<tr>
<td>Theater 101, 102, 108, 120, 141, 144, 145, 147, 148, 160, 201, 203, 210, 212, 217, 260</td>
<td></td>
</tr>
</tbody>
</table>
MINIMUM CREDITS

ETHICS AND LOGIC
Philosophy 101, 102, 104, 202, 204, 205
(Philosophy 204 will satisfy a 300-level general education requirement at W.M.U.)

SOCIAL RELATIONSHIPS
Economics 101, 102, 130
Psychology 102, 201, 202, 203, 205A
Sociology 101, 102, 202, 203, 206
Women’s Studies 101

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

AMERICAN
History 201, 202, 207, 211, 220
Political Science 111, 205, 220

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, 210, 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
(History 210 will satisfy a 300-level general education requirement at W.M.U.)

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

MAJOR RELATED COURSES
Mathematics 161, 162 Calculus I & II
Mathematics 276 Linear Algebra with Applications

CHOOSE FROM THE FOLLOWING MAJOR OPTIONS:

GENERAL OPTION
CIS 120A Introduction to Computer Information Systems
(does not count toward any CS major but is a prerequisite for other M.C.C. courses)
Choose two courses from:
CIS 130 COBOL Programming
CIS 160A Visual BASIC Programming
CIS 185 ’C’ Programming
CIS 183 Networking Technologies
CIS 210 Operating System Concepts
CIS 260 Advanced BASIC Programming (prerequisite: CIS 160A)
CIS 265 Visual C# Programming
CIS 280 Java Programming (prerequisite: CIS 185)
Electives variable
OR

THEORY AND ANALYSIS OPTION
Communications 101 Oral Communications 3
or
Communications 201 Public Speaking 3
Choose up to three courses from the following - W.M.U. requires a one-year sequence in one subject 0-15
(other options are available at W.M.U.):
   Biology 104Lec & 104A; Chemistry 101Lec & 101A, 102Lec & 102A; Geology 101A, 102; Physics 203L&L, 204L&L.
Elective(s) variable

TOTAL 62

NOTES:

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

It is recommended that Computer Science majors become familiar with the Computer Science section in the W.M.U. catalog available on-line at www.wmich.edu/catalog.

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