Western Michigan University Biology Curriculum Guide

Pre biology requirements:

- The following courses are the prerequisites for biology, biomedical sciences, and biology-secondary education (high school level) majors;
- This major is also a good choice for students going into graduate programs and professional schools such as physician assistant, physical therapy, and medical, dental, and veterinary schools;
- A minimum of 15 credits of biology must be earned at WMU for the major;
- Only departmental courses in which a grade of “C” or better is obtained may be counted toward a major or minor in Biological Sciences.

<table>
<thead>
<tr>
<th>WMU courses</th>
<th>Harper courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 1600</td>
<td>BIO 101</td>
</tr>
<tr>
<td>BIOS 2020</td>
<td>BIO 120 - Not for Biomed majors</td>
</tr>
<tr>
<td>BIOS 2030</td>
<td>BIO 140 - Biology majors only</td>
</tr>
<tr>
<td>BIOS 2320</td>
<td>BIO 130 - Sec Ed. majors only</td>
</tr>
<tr>
<td>BIOS 2400</td>
<td>BIO 161 - Sec Ed. majors only</td>
</tr>
<tr>
<td>CHEM 1100/1110</td>
<td>CHM 121</td>
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<tr>
<td>CHEM 1120/1130</td>
<td>CHM 122</td>
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<tr>
<td>CHEM 3750/3760</td>
<td>Check with WMU advisor about what transfers</td>
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</tbody>
</table>

Note: Most biomedical science majors minor in chemistry. Therefore, you are advised not to take the 2nd Organic chemistry class at the community college. The minor requires at least 7 credits at WMU, and if you wait to take it at WMU you will only need 2 classes at WMU for the minor. Biology and Biology-Secondary Education majors are advised not to take organic chemistry 1 or 2 at the community college for the same reason.
General education requirements:

- Please see the [general education program transfer guide](#);
- Two semesters of a foreign language are required in the College of Arts and Sciences (CAS). The requirement can be met by:
  - Completing a minimum of 2 years of one high school language, with a B- or higher grade in the 4th semester or at any point after that, if more than 2 years are completed;
  - Completing 2 semesters of one language in college;
  - Or through passing a language proficiency test. Please contact the WMU World Languages department for languages other than Spanish, and the Spanish department for that language;
- The College of Arts and Sciences also requires a critical thinking course, to be chosen from Proficiency 4c (see the general education link in the first bullet, above).

Important notes:

- The chemistry, physics, and mathematics courses are called “cognate” requirements for biology department majors and are definitely required;
- The physics and chemistry courses have a minimum prerequisite of successful completion of high school advanced algebra (MTH 103 at Harper);
- Chemistry 1100 also requires a high school chemistry course as a prerequisite (same as CHM 110 at Harper). Students should be aware of these prerequisites while they are beginning at the community college;
- For questions about general education requirements please contact the WMU College of Arts and Sciences advisors at the email address given below;
- Prior to enrolling in WMU courses, students should consult the biology department advisor listed below.

Approved by:
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