Western Michigan University Secondary Education - Biology Curriculum Guide

General Information:

- A Secondary Provisional Certificate is valid for teaching your subject areas (major and minor) in grades 6-12;
- Students must choose at least one teachable major and one teachable minor. For a list of teachable majors and minors see the content areas in secondary education on the WMU Secondary Education website;
- Students are encouraged to meet with a WMU education advisor as early as possible prior to transfer for assistance with their choice of majors and minors;
- Course sequencing at WMU in Secondary Education requires at least two years to complete, and a minimum of 60 credits of the overall degree must be completed at WMU;
- Students who choose Biology as their teaching major or minor will follow requirements in the Biology department for the major or minor. General education and teacher preparation requirements are determined by the College of Education and Human Development (CEHD);
- All applicants intending to pursue a teaching program at WMU will be admitted into “pre-education” at the time of admission to WMU. After completion of the pre-professional requirements, pre-education students must apply to the upper level as indicated below;
- For students who started at Bay before Fall 2014, and will transfer directly to WMU, your requirements may be different. Please check with the CEHD advising office (contact information is listed below);
- At the end of their professional education program, students must complete a minimum of one semester of Internship (Student Teaching).

Pre-Professional Requirements for Secondary Education A&S Majors:

After satisfying the following requirements students should submit the Professional Education Admission application for admission to upper professional level education courses:

- Completion of at least 60 credit hours;
- Completion of all WMU Intellectual Skills Development classes IF REQUIRED (e.g. MATH 1090, LS 1040, ENG 1000);
- Completion of an approved college level writing class;
- Completion of ES 2000 or an approved course with a grade of CB (2.5) or better;
- Achievement of a cumulative grade point average (GPA) of 3.00 or better; **
- Achievement of passing scores on the Michigan Test for Teacher Certification (MTTC)-
  Professional Readiness Exam (PRE) (#96), or passing by an alternate method. Please contact the
  CEHD advising office if you have questions;
- Criminal background check and Judgment of Sentence or Register of Action for any convictions;
- Submission of a formal application to the Office of Admissions and Advising, Western Michigan
  University, Kalamazoo, MI 49008-5275;
- Please visit the WMU College of Education website for additional information.

** Any student with a cumulative GPA between 2.75 and 2.99 who has met all of the other
requirements may apply for provisional admission to the professional education program. Provisional
admission decisions will be made by secondary education faculty and admission is not guaranteed.

Courses that can be taken at Bay de Noc:

<table>
<thead>
<tr>
<th>WMU courses</th>
<th>Bay courses</th>
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<tbody>
<tr>
<td>BIOS 1600</td>
<td>BIOL 202*</td>
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<tr>
<td>BIOS 1610</td>
<td>BIOL 112*</td>
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<tr>
<td>BIOS 1620</td>
<td>BIOL 110*</td>
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<tr>
<td>BIOS 2500</td>
<td>BIOL 255 and 256*</td>
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<tr>
<td>BIOS 3010</td>
<td>BIOL 270 and 271*</td>
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<tr>
<td>BIOS 2320</td>
<td>BIOL 226</td>
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<tr>
<td>BIOS 2400</td>
<td>BIOL 214</td>
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<tr>
<td>MATH 1220</td>
<td>MATH 141*</td>
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(Students minoring in Biology may take MATH 111 instead of 141)

| STAT 3660   | MATH 210    |
| CHEM 1100 and 1110 | CHEM 110* |
| CHEM 1120 and 1130 | CHEM 112* |
| CHEM 3750 and 3760 | CHEM 201** |
| CHEM 3770 and 3780 | CHEM 202** |
| PHYS 1130 and 1140 | PHYS 201   |
| PHYS 1150 and 1160 | PHYS 202   |

*The courses with the single asterisks are required for students who want to MINOR in Biology. The
minor requires 27 credits in Biology plus cognate courses in Chemistry and Mathematics.

**Very important:** The WMU Biology department has ruled that at least 12 biology credits MUST BE
TAKEN AT WMU for the MINOR and 15 credits for the MAJOR. All/any cognates may come from another
institution.

**For students who are not minoring in Chemistry, the Organic requirement is only CHEM 3700 and
3710 (a lab) at WMU. The two organic chemistry courses at Bay will cover the requirement, but you
may also wait until you get to WMU and take just the one chemistry course and lab instead of two.

General education requirements:
• Please refer to the WMU general education transfer guide and talk with your WMU College of Education and Human Development (CEHD) advisor.

**Contact information:**

Megan Larson - Academic Advisor  or  College of Education and Human Development (CEHD)
Department of Biological Sciences  or  wmich.edu/education/advising
bios-advising@wmich.edu  or  (269) 387-3474
(269) 387-5617