Overall Major Requirements

- 42-60 non-duplicative biology credits
- A minimum of 36 senior-level credits
- A minimum of 18 credits at the 300- or 400-level
- At least 6 credits at the 400-level
- All Biology majors complete the same 12 credits in Specific Major Requirements, and an additional 30 to 48 credits in senior-level courses which are determined by a student’s choice of either the (1) General Biology Major, or one of the (2) Molecular/Cellular or (3) Ecology and Diversity Streams

Declaration Process

The Biology major is a competitive major. Students must complete BIOL 107 and BIOL 108 plus one of BIOL 207 or BIOL 208 with no grade lower than C-. They must also have either completed or be enrolled in the remaining BIOL 207 or 208 course during the winter term when declarations close.

The number of new seats available in the Biology major will be determined by the Biology department annually. Students will submit their declaration by January 15. Students who apply will be ranked by their admissions GPA, which is calculated using their most recent 24 credits of university-level coursework, without breaking up a term. The applicants with the highest GPA will be admitted to the program first, until no seats remain. Students will be notified of the success or denial of their application to the Biology major no later than February 1.

For the 2018-19 declaration period only, students may get their declaration approved in the fall term if they meet all of the following criteria:

1. Students have already completed BIOL 107, BIOL 108, and one of BIOL 207 or BIOL 208 with no grade lower than C-.
2. Students must also have completed or be enrolled in the remaining BIOL 207 or 208 during the fall or winter term when declarations close.
3. Students must have completed a minimum of 24 credits prior to the fall 2018 term with a minimum AGPA of 2.7/4.0.

Required Courses for the Biological Sciences Major

Biological Science majors are required to complete the following courses:

- CHEM 101 University Chemistry I
- CHEM 102 University Chemistry II
- STAT 151 Introduction to Applied Statistics OR STAT 161 Applied Statistics for the Social Sciences

Specific Major Requirements (Required for all Majors)

12 Credits

- BIOL 107 Introduction to Cell Biology
- BIOL 108 Organisms in Their Environment
- BIOL 207 Principles of Genetics
- BIOL 208 Principles of Ecology

Choose one of the following for the remaining 30-48 credits:

(1) General Biological Sciences Requirements

Students may choose from junior- and senior-level Biochemistry, Biology, Botany, Genetics, Zoology or SCIE 201

(2) Molecular/Cellular Stream Requirements

30 to 48 Credits
Students can choose up to 18 credits in junior- and senior-level Biochemistry, Biology, Botany, Genetics, Zoology or SCIE 201:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 107</td>
<td>Fundamental Plant Physiology</td>
</tr>
<tr>
<td>BIOL 108</td>
<td>Animal Physiology I</td>
</tr>
<tr>
<td>BIOL 205</td>
<td>Animal Physiology II</td>
</tr>
</tbody>
</table>

**Important Planning Notes**

1. Courses required for the major may be used to satisfy the breadth requirements in a Bachelor of Arts or Science degree. Please refer to the applicable degree planner for details.

2. Students are required to consult the MacEwan University academic calendar to ensure they meet prerequisites for all courses they enrol in.

3. **BIOL 107** and **BIOL 108** must be completed in the first year of a program and can be taken in either order.

4. All students majoring in Biological Sciences should take careful note of the term in which courses are offered; many essential senior-level Biological Sciences courses are offered only once a year. Some senior level courses are offered in alternate years.

5. For students interested in pursuing the Molecular/Cellular Biology stream, **BIOL 205** and **BIOL 207** should be completed in the second year of their program. For students interested in pursuing the Ecology/Diversity Biology stream, **BIOL 208** should be completed in the second year of their program.

6. Students interested in pursuing the Ecology/Diversity Biology stream are encouraged, but not required, to take **STAT 151** in their first year. While it is not a prerequisite for **BIOL 208**, it can be helpful with some of the material covered in the course.

7. **CHEM 101** and **CHME 103** are equivalent courses. Credit can be obtained in only one of the two courses.

8. **CHEM 102** and **CHME 105** are equivalent courses. Credit can be obtained in only one of the two courses.

9. Students may take **BIOL 495** and **BIOL 498** for credit a maximum of two times each, as long as the course topic is different each time they take either course.

10. Please keep in mind that course offerings will vary from academic year to academic year.

**Biological Sciences Course Offerings**

Please refer to the academic calendar or MacEwan.ca/Science > Disciplines > Biological Sciences for further information regarding course offerings.