Bachelor of Science in Biology  
2015 - 2016

<table>
<thead>
<tr>
<th>GENERAL EDUCATION &amp; INSTITUTIONAL REQUIREMENTS</th>
<th>Minimum 30 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requirement</td>
<td>Course</td>
</tr>
<tr>
<td>☐ Computer Literacy</td>
<td>CIS 1200 or CIS 1201 or (CS 1400 and CS 1410)</td>
</tr>
<tr>
<td>☐ English</td>
<td>ENGL 1010 or ENGL 1010A or ENGL 1010D</td>
</tr>
<tr>
<td>☐ English</td>
<td>ENGL 2010 or ENGL 2010A</td>
</tr>
<tr>
<td>☐ Information Literacy</td>
<td>LIB 1000 or LIB 1010</td>
</tr>
<tr>
<td>☐ Mathematics</td>
<td>3-5 Math placement score or MATH prerequisite</td>
</tr>
<tr>
<td>☐ American Institutions</td>
<td>3-6 Reading placement score</td>
</tr>
<tr>
<td>☐ Life Sciences</td>
<td>3-10</td>
</tr>
<tr>
<td>☐ Physical Sciences</td>
<td>3-5</td>
</tr>
<tr>
<td>☐ Laboratory Science</td>
<td>0-1</td>
</tr>
<tr>
<td>☐ Fine Arts</td>
<td>3</td>
</tr>
<tr>
<td>☐ Literature / Humanities</td>
<td>3</td>
</tr>
<tr>
<td>☐ Social &amp; Behavioral Sciences</td>
<td>3</td>
</tr>
<tr>
<td>☐ Exploration</td>
<td>3-5 3-5 credits, prefix not used in other GE</td>
</tr>
<tr>
<td>☐ Global &amp; Cultural Perspectives</td>
<td>0-3 - Complete two with different prefixes</td>
</tr>
<tr>
<td>☐ Global &amp; Cultural Perspectives</td>
<td>0-3 - Can share credit with other GE</td>
</tr>
<tr>
<td>OR</td>
<td></td>
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<tr>
<td>☐ Associate of Arts or Associate of Science degree</td>
<td>Date: USHE? Y / N</td>
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<thead>
<tr>
<th>RECOMMENDED ELECTIVE</th>
<th>Course Number</th>
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<tbody>
<tr>
<td>☐ BIOL 1001</td>
<td>FYE: Biology</td>
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<tr>
<td>☐ BIOL 1610/15 OR BIOL 1610A/15A</td>
<td>Prtinciples of Biology I / Lab</td>
</tr>
<tr>
<td>☐ BIOL 1620/25 OR BIOL 1620A/25A</td>
<td>Principles of Biology II / Lab</td>
</tr>
<tr>
<td>☐ BIOL 3010</td>
<td>Evolution</td>
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<tr>
<td>☐ BIOL 3030</td>
<td>Molecular Genetics</td>
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<thead>
<tr>
<th>BIOLOGY PROGRAM REQUIREMENTS</th>
<th>35 credits</th>
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<tbody>
<tr>
<td>Course Number</td>
<td>Description</td>
</tr>
<tr>
<td>☐ CHEM 1210/15</td>
<td>Principles of Chemistry I / Lab</td>
</tr>
<tr>
<td>☐ CHEM 1220/25</td>
<td>Principles of Chemistry II / Lab</td>
</tr>
<tr>
<td>☐ CHEM 2310/15</td>
<td>Organic Chemistry I / Lab</td>
</tr>
<tr>
<td>☐ CHEM 2320/25</td>
<td>Organic Chemistry II / Lab</td>
</tr>
<tr>
<td>☐ MATH 1210</td>
<td>Calculus I</td>
</tr>
<tr>
<td>Complete one (1) of the following series of courses:</td>
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<tr>
<td>☐ PHYS 2010/15 and PHYS 2020/25</td>
<td>College Physics I / Lab and College Physics II / Lab</td>
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<td>Or</td>
<td></td>
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<tr>
<td>☐ PHYS 2210/25 and PHYS 2220/25</td>
<td>Physics/Sci Engineers I / Lab and Physics/Sci Engineers II / Lab</td>
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</tbody>
</table>

Complete one (1) of the following series of courses:

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<table>
<thead>
<tr>
<th>BIOLOGY CORE REQUIREMENTS</th>
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<tbody>
<tr>
<td>☐ BIOL 1610/15 OR BIOL 1610A/15A</td>
</tr>
<tr>
<td>☐ BIOL 1620/25 OR BIOL 1620A/25A</td>
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<tr>
<td>☐ BIOL 3010</td>
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<tr>
<td>☐ BIOL 3030</td>
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</table>

Complete one (1) of the following series of courses:
### BIOL 3040/45
- **General Ecology / Lab**
- CR: 4
- Prerequisites: BIOL 1620/25 or BIOL 1620A/25A (both ≥C)

### BIOL 3150/55
- **Biostatistics and the Sci Method / Lab**
- CR: 3
- Prerequisites: BIOL 3010, 3030, 3040; MATH 1050 (all ≥C)

Complete **one (I)** of the following sets of courses:

#### General Microbiology / Lab or Eukaryotic Cell Biology / Lab
- CR: 4
- Prerequisites: BIOL 3010, 3030, 3040; CHEM 2310/15 (all ≥C)

Complete **one (I)** of the following:

#### Senior Seminar I or Senior Seminar II
- CR: 1
- Prerequisites: ENGL 2010 or ENGL 2010A, and Advanced Standing

### BIOL 4910 or BIOL 4920
- **Senior Seminar I or Senior Seminar II**
- CR: 1
- Prerequisites: ENGL 2010 or ENGL 2010A, and Advanced Standing

### BIOLOGY ELECTIVES 22-23 credits

Complete **one (I)** of the following sets of courses:

#### Comp Vertebrate Physiology / Lab
- CR: 4
- Prerequisites: BIOL 3010, 3030; CHEM 1220 (all ≥C)

#### Plant Physiology / Lab
- CR: 4
- Prerequisites: BIOL 3010, 3030; CHEM 1220 (all ≥C)

Complete **one (I)** of the following sets of courses:

#### Invertebrate Zoology / Lab
- CR: 4
- Prerequisites: BIOL 3010, 3030; CHEM 1220 (all ≥C)

#### Plant Taxonomy / Lab
- CR: 4
- Prerequisites: BIOL 3010, 3030; CHEM 1220 (all ≥C)

#### General Parasitology / Lab
- CR: 4
- Prerequisites: BIOL 3010, 3030; CHEM 1220 (all ≥C)

#### Marine Biology
- CR: 3
- Prerequisites: BIOL 3010, 3030, BIOL 3040/45 (all ≥C)

#### Ornithology / Lab
- CR: 3
- Prerequisites: BIOL 3010, 3030, BIOL 3040/45 (all ≥C)

#### Mammalogy / Lab
- CR: 4
- Prerequisites: BIOL 3010, 3030, BIOL 3040/45 (all ≥C)

#### General Entomology / Lab
- CR: 4
- Prerequisites: BIOL 3010, 3030, BIOL 3040/45 (all ≥C)

Complete **14-15 credits** from the following or from any upper-division BIOL course listed above not already used to fulfill a requirement:

#### Rural Health Scholars
- CR: 1
- Prerequisites: 2 credits maximum

#### Bioethics
- CR: 3
- Prerequisites: BIOL 3010, BIOL 3030, BIOL 3040 (all ≥C)

#### Scientific Writing
- CR: 2
- Prerequisites: BIOL 3010, BIOL 3030, BIOL 3040 (all ≥C); & ENGL 2010/A (can be concurrent)

#### Comp. Vertebrate Anatomy / Lab
- CR: 4
- Prerequisites: BIOL 3010, BIOL 3030 (all ≥C)

#### Cadaver Practicum
- CR: 2
- Prerequisites: BIOL 2320/25 and instructor permission

#### Cancer Biology
- CR: 2
- Prerequisites: BIOL 3010, BIOL 3030 (all ≥C)

#### Plant Anatomy / Lab
- CR: 4
- Prerequisites: BIOL 1620/25/A and BIOL 2400/05

#### Developmental Biology
- CR: 3
- Prerequisites: BIOL 3010, BIOL 3030, BIOL 3040 (all ≥C)

#### Biology of Infectious Disease
- CR: 3
- Prerequisites: BIOL 3010, BIOL 3030, BIOL 3040 (all ≥C)

#### Introduction to Immunology
- CR: 3
- Prerequisites: BIOL 3010, BIOL 3030, BIOL 3040 (all ≥C)

#### Mammalian Histology / Lab
- CR: 4
- Prerequisites: BIOL 3010, BIOL 3030 (all ≥C)

#### Virology
- CR: 4
- Prerequisites: BIOL 3450/55 or BIOL 3550/55 (both ≥C)

#### Molecular Biology / Lab
- CR: 4
- Prerequisites: BIOL 3450/55 or BIOL 3550/55 (both ≥C)

#### Animal Behavior / Lab
- CR: 4
- Prerequisites: BIOL 3010, BIOL 3030, BIOL 3040/45 (all ≥C)

#### Pathophysiology
- CR: 3
- Prerequisites: BIOL 2320/25 and BIOL 2420/25

#### Plant Ecology / Lab
- CR: 3
- Prerequisites: BIOL 3150/55 (C or higher)

#### Independent Research
- CR: 1-4
- Prerequisites: See Catalog

#### Independent Research
- CR: 1-4
- Prerequisites: See Catalog

#### Senior Thesis
- CR: 1-4
- Prerequisites: Senior, inst perm, BIOL 3110 (or concurrent)

### GRADUATION REQUIREMENTS

Subtract duplicated and developmental (0990 and below) credits. Minimum 120 college-level credits (1000 and above).

At least 40 upper-division credits (3000 and above). At least 30 upper-division credits at DSU for institutional residency

Cumulative GPA 2.0 or higher. Grade C or higher required (not C-) in each Program Requirement, Core Discipline Requirement, and Biology Elective Requirement course. Maximum 6 total credits of BIOL 4810R, BIOL 4820R, BIOL 4830R, and/or BIOL 4930R may be used toward Biology requirements.

March 2015