**B.A., BIOLOGICAL SCIENCES**

**Minimum Requirements for Degree: 120 credits**
Students must earn a C- grade or better in each course.

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<th>Credits</th>
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<td></td>
<td><strong>General University Requirements</strong></td>
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<td>Complete the general university requirements. (<a href="http://catalog.uaf.edu/bachelors/">http://catalog.uaf.edu/bachelors/</a>)</td>
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<td><strong>General Education Requirements</strong></td>
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<td>As part of the general education requirements, complete:</td>
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<tr>
<td></td>
<td>CHEM F105X  General Chemistry I</td>
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<tr>
<td></td>
<td>and CHEM F106X  General Chemistry II</td>
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<td><strong>B.A. Degree Requirements</strong></td>
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<td>Complete the B.A. degree requirements. (<a href="http://catalog.uaf.edu/bachelors/summary-of-bachelors-degree-reqs/#bachelorofartstext">http://catalog.uaf.edu/bachelors/summary-of-bachelors-degree-reqs/#bachelorofartstext</a>)</td>
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<td>As part of the B.A. degree requirements, complete:</td>
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<td>STAT F200X  Elementary Statistics</td>
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<td><strong>Program Requirements</strong></td>
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<td></td>
<td>BIOL F115X  Fundamentals of Biology I</td>
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<tr>
<td></td>
<td>BIOL F116X  Fundamentals of Biology II</td>
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<tr>
<td></td>
<td>BIOL F260  Principles of Genetics</td>
<td>4</td>
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<tr>
<td></td>
<td>BIOL F481  Principles of Evolution</td>
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<td>CHEM F321  Organic Chemistry I</td>
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<td></td>
<td>PHYS F123X  College Physics I</td>
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<tr>
<td></td>
<td>or CS F103  Introduction to Computer Programming</td>
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<tr>
<td></td>
<td>or CS F201  Computer Science I</td>
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<td></td>
<td><strong>Biology Breadth Requirements</strong></td>
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<tr>
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<td>Complete two from the following:</td>
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<tr>
<td></td>
<td>BIOL F310  Animal Physiology</td>
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<tr>
<td></td>
<td>or BIOL F111X  Human Anatomy and Physiology I</td>
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<tr>
<td></td>
<td>and BIOL F112X  Human Anatomy and Physiology II</td>
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<tr>
<td></td>
<td>or BIOL F342  Microbiology</td>
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<tr>
<td></td>
<td>or BIOL F434  Structure and Function of Vascular Plants</td>
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<tr>
<td></td>
<td>BIOL F360  Cell and Molecular Biology</td>
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<td></td>
<td>BIOL F371  Principles of Ecology</td>
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<td></td>
<td><strong>Electives</strong></td>
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<td>Complete three courses from the following:</td>
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<td>Elective Course Lists A, B, C, D, or E</td>
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<tr>
<td></td>
<td><strong>Capstone</strong></td>
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<tr>
<td></td>
<td>BIOL F400  Biological Sciences Capstone Project</td>
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<td>Satisfactory completion of a capstone research project which can be done either working individually with a faculty member or within one of the following courses:</td>
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<tr>
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<td>BIOL F434  Structure and Function of Vascular Plants</td>
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<tr>
<td></td>
<td>BIOL F440  Behavioral Neuroscience Research Capstone</td>
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<td></td>
<td>BIOL F441  Animal Behavior</td>
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<tr>
<td></td>
<td>BIOL F466  Advanced Cell and Molecular Laboratory</td>
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**Note:** A foreign language is encouraged by the department in meeting requirements of the core curriculum.

**Biology Elective Course Lists**
Courses that satisfy upper-division elective credit may require prerequisites.

**LIST A - CELL AND MOLECULAR BIOLOGY**

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<td>BIOL F360  Cell and Molecular Biology</td>
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<td>BIOL F417  Neurobiology</td>
<td>3</td>
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<tr>
<td>BIOL F435  Introduction to Biology of Cancer</td>
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<tr>
<td>BIOL F460  Principles of Virology</td>
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<td>BIOL F462  Infectious Diseases</td>
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<td>BIOL F465  Immunology</td>
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<td>BIOL F466  Advanced Cell and Molecular Laboratory</td>
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<td>BIOL F491  The Human Microbiome</td>
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<td>CHEM F325  Organic Chemistry II</td>
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<td>CHEM F351  General Biochemistry. Metabolism</td>
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<td>CHEM F450  Information Storage and Transfer : Molecules and Pathways</td>
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<tr>
<td>CHEM F470  Cellular and Molecular Neuroscience</td>
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<td>CHEM F474  Neurochemistry</td>
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**LIST B - PHYSIOLOGY**

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<td>BIOL F310  Animal Physiology</td>
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<td>BIOL F312  Medical Physiology</td>
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<td>BIOL F335  Principles of Epidemiology</td>
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<td>BIOL F342  Microbiology</td>
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<td>BIOL F412  Exercise Physiology</td>
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<td>BIOL F417  Neurobiology</td>
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<tr>
<td>BIOL F331</td>
<td>Biolog F331: Introduction to Plant Biology</td>
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<td>BIOL F341</td>
<td>Systematic Botany</td>
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<td>BIOL F346</td>
<td>Entomology</td>
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<td>BIOL F347</td>
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**LIST E - BIOMEDICAL SCIENCE**

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<td>Biolog F312: Medical Pharmacology</td>
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<tr>
<td>BIOL F335</td>
<td>Biolog F335: Principles of Epidemiology</td>
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<td>BIOL F401</td>
<td>Biolog F401: Fundamentals of Pharmacology</td>
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<tr>
<td>BIOL F402</td>
<td>Biolog F402: Biomedical Research Ethics</td>
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<td>BIOL F412</td>
<td>Biolog F412: Exercise Physiology</td>
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