# BACHELOR OF SCIENCE IN BIOLOGY (Pre-Med and Biomed Option)

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Milestone Course(s)</th>
<th>Milestone Note</th>
<th>Term</th>
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</thead>
<tbody>
<tr>
<td>BIOL 120 - Fundamentals of Biology</td>
<td>4</td>
<td>Milestone Course</td>
<td>Core Course. Prerequisite for BIOL 121</td>
<td></td>
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<tr>
<td>CHEM 105 - General Chemistry I</td>
<td>3</td>
<td>Milestone Course</td>
<td>Prerequisite for CHEM 106, CHEM 108, BIOL 270, BIOL 341</td>
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<tr>
<td>CHEM 107 - General Chemistry Laboratory I</td>
<td>2</td>
<td>Milestone Course</td>
<td>Prerequisite for CHEM 106, CHEM 108, BIOL 270, BIOL 341</td>
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<tr>
<td>ENGL 101 - English Composition I</td>
<td>3</td>
<td></td>
<td>Prerequisite for ENGL 102, ENGL 112</td>
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<tr>
<td>G ED 101 (NSM)</td>
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<td><strong>Semester Total</strong></td>
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<tr>
<th>Second Semester</th>
<th>Hours</th>
<th>Milestone Course(s)</th>
<th>Milestone Note</th>
<th>Term</th>
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<tbody>
<tr>
<td>BIOL 121 - Biological Diversity</td>
<td>4</td>
<td>Milestone Course</td>
<td>Core Course. Prerequisite for BIOL 331, BIOL 341</td>
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<tr>
<td>CHEM 106 - General Chemistry II</td>
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<td>Milestone Course</td>
<td>Prerequisite for BIOL 270</td>
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<tr>
<td>CHEM 108 - General Chemistry Laboratory II</td>
<td>2</td>
<td>Milestone Course</td>
<td>Prerequisite for BIOL 270</td>
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<tr>
<td>ENGL 102 or ENGL 112 - English Composition II or Technical Writing</td>
<td>3</td>
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<tr>
<td>ART 101 or another G ED Arts</td>
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<td><strong>Semester Total</strong></td>
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<th>Third Semester</th>
<th>Hours</th>
<th>Milestone Course(s)</th>
<th>Milestone Note</th>
<th>Term</th>
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<tbody>
<tr>
<td>BIOL 250 or BIOL 270 - General Ecology or Genetics</td>
<td>4</td>
<td>Milestone Course</td>
<td>Core Course - (BIOL 270 is a prerequisite for BIOL 385)</td>
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<tr>
<td>CHEM 205 - Organic Chemistry I</td>
<td>3</td>
<td>Milestone Course</td>
<td>Prerequisite for CHEM 206</td>
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<tr>
<td>CHEM 207 - Organic Chemistry Laboratory I</td>
<td>2</td>
<td>Milestone Course</td>
<td>Prerequisite for CHEM 208</td>
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<tr>
<td>ENGL 150 or another G ED Humanities</td>
<td>3</td>
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<td>COMM 100 - Speech Communication</td>
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<th>Fourth Semester</th>
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<tr>
<td>BIOL 250 or BIOL 270 - General Ecology or Genetics</td>
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<td>CHEM 206 - Organic Chemistry II</td>
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<tr>
<td>CHEM 208 - Organic Chemistry Laboratory II</td>
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<td>Prerequisite for BIOL 385</td>
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<tr>
<td>HHP 122 or another G ED Wellness</td>
<td>2</td>
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<td>HST 208 or another G ED History</td>
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<th>Fifth Semester</th>
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<tbody>
<tr>
<td>BIOL 331 - Human Anatomy and Physiology</td>
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<td>Core Course. Prerequisite for BIOL 332</td>
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<tr>
<td>PHYS 201 - General Physics I</td>
<td>4</td>
<td>Milestone Course</td>
<td>Prerequisite for PHYS 202</td>
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<tr>
<td>PHYS 203 - General Physics Laboratory I</td>
<td>1</td>
<td>Milestone Course</td>
<td>Prerequisite for PHYS 204</td>
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<tr>
<td>MATH 206 or 222 - Analytic Geometry and Calc I or Elem Stats for Math &amp; Natural Science</td>
<td>4</td>
<td>Milestone Course</td>
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<tr>
<td>Free Elective</td>
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<th>Sixth Semester</th>
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<tbody>
<tr>
<td>BIOL 332 - Human Anatomy and Physiology II</td>
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<td>Milestone Course</td>
<td>Core Course</td>
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<tr>
<td>BIOL 385 - Cell Biology</td>
<td>4</td>
<td>Milestone Course</td>
<td>Core Course. Prerequisite for BIOL 411</td>
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<tr>
<td>PHYS 202 - General Physics II</td>
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<td>Milestone Course</td>
<td>Core Course</td>
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<tr>
<td>PHYS 204 - General Physics Laboratory II</td>
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<tr>
<td>PSOC 100 or another G ED Social Science</td>
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<tr>
<th>Seventh Semester</th>
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<th>Milestone Course(s)</th>
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<tbody>
<tr>
<td>BIOL 341 - Microbiology</td>
<td>4</td>
<td>Milestone Course</td>
<td>Core Course</td>
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<tr>
<td>PHYS 106 or another G ED Natural Sciences</td>
<td>4</td>
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<td>Recommend BIOL 101 NOT be taken as the G Ed Nat Sci</td>
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<tr>
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<td>Free Electives</td>
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<tr>
<th>Eighth Semester</th>
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<th>Milestone Course(s)</th>
<th>Milestone Note</th>
<th>Term</th>
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<tbody>
<tr>
<td>BIOL 411 - Senior Seminar</td>
<td>1</td>
<td>Milestone Course</td>
<td>Sr. Capstone &amp; Core Course (Should be completed last semester)</td>
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<tr>
<td>BIOL ELECTIVE</td>
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<tr>
<td>BIOL ELECTIVE</td>
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<tr>
<td>PSOC 210 or another G ED International Perspectives</td>
<td>3</td>
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<tr>
<td>Free Elective</td>
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<tr>
<td><strong>Semester Total</strong></td>
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</table>

ît See reverse of this page for General Education coursework options
### GENERAL EDUCATION COMPONENT AND COURSEWORK OPTIONS

Courses with a 🟢 indicate that the course is recommended from a list of courses within a specific General Education Component. Students may choose to take another course within the same General Education Component in place of the recommended course. For descriptions of these courses, consult the online West Virginia State University Catalog.

Some prerequisite requirements are listed in the course schedule; others are at the end of the course descriptions in the University Catalog. Be sure you meet the prerequisites for a particular course before enrolling in the course.

<table>
<thead>
<tr>
<th>Arts (3 credit hours)</th>
<th>Scientific Reasoning (3-4 credit hours)</th>
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<tbody>
<tr>
<td>ART 101 Studio I - Introduction to Art</td>
<td>BIOL 101 Principles of Biology (4 credits)</td>
</tr>
<tr>
<td>ART 101H Studio I – Introduction to Art (Honors)</td>
<td>BIOL 101H Principles of Biology (Honors) (4 credits)</td>
</tr>
<tr>
<td>COMM 170 The Art of the Theater</td>
<td>BIOL 108 Environmental Biology (4 credits)</td>
</tr>
<tr>
<td>MUSIC 107 Appreciation of Music</td>
<td>BIOL 110 Economic Biology (4 credits)</td>
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<td>BIOL 120 Fundamentals of Biology (4 credits)</td>
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<table>
<thead>
<tr>
<th>International Perspectives (3 credit hours)</th>
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</thead>
<tbody>
<tr>
<td>COMM 446 International Cinema</td>
<td>CHEM 100 Consumer Chemistry (3 credits)</td>
</tr>
<tr>
<td>INTS 210 Introduction to International Perspectives</td>
<td>CHEM 100H Consumer Chemistry (Honors) (3 credits)</td>
</tr>
<tr>
<td>INTS 250 Diversity in African Studies</td>
<td>PHYS 101 Physical Science Survey I (3 credits)</td>
</tr>
<tr>
<td>ECON 109 Intro to World Economy</td>
<td>PHYS 102 Physical Science Survey II (4 credits)</td>
</tr>
<tr>
<td>ENGL 350 World Literature Classical Era</td>
<td>PHYS 103 Elements of Physical Science (3 credits)</td>
</tr>
<tr>
<td>ENGL 351 World Literature Modern Era</td>
<td>PHYS 106 Intro. to Physical Geology (4 credits)</td>
</tr>
<tr>
<td>ENGL 440 Interpreting the Holocaust</td>
<td>PHYS 107 Historical Geology (4 credits)</td>
</tr>
<tr>
<td>FREN 101 Beginning French</td>
<td>PHYS 110 Weather and Climate (4 credits)</td>
</tr>
<tr>
<td>FREN 102 Elementary French</td>
<td>PHYS 111 Energy and the Environment (4 credits)</td>
</tr>
<tr>
<td>FREN 205 A View of Changing Culture</td>
<td>PHYS 120 Astronomy (3 credits) &amp; (optional) PHYS 121 Astronomy Lab</td>
</tr>
<tr>
<td>FREN 443 West African Culture</td>
<td>PHYS 121 Astronomy Lab (1 credit)</td>
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<tr>
<td>GERM 101 Beginning German</td>
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<tr>
<td>GERM 102 Elementary German</td>
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<tr>
<td>SPAN 101 Beginning Spanish</td>
<td>BIOL 101 Principles of Biology (4 credits)</td>
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<tr>
<td>SPAN 102 Elementary Spanish</td>
<td>BIOL 101H Principles of Biology (Honors) (4 credits)</td>
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<tr>
<td>SPAN 205 Spain and Its Culture</td>
<td>BIOL 108 Environmental Biology (4 credits)</td>
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<tr>
<td>POSC 210 International Relations</td>
<td>BIOL 110 Economic Biology (4 credits)</td>
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<tr>
<td>POSC 415 Arab Middle East</td>
<td>BIOL 120 Fundamentals of Biology (4 credits)</td>
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<tr>
<td>PHIL 308 World Religions</td>
<td>CHEM 100 Consumer Chemistry (3 credits)</td>
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<tr>
<td>EDUC 319 Content Area Literacy</td>
<td>CHEM 100H Consumer Chemistry (Honors) (3 credits)</td>
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<tr>
<td>EDUC 321 Teaching Writing in the Elementary School</td>
<td>CHEM 132 Introductory Environmental Chemistry (3 credits)</td>
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<table>
<thead>
<tr>
<th>History (3 credit hours)</th>
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<tbody>
<tr>
<td>HIST 201 World History</td>
<td>PHYS 101 Physical Science Survey I (3 credits)</td>
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<tr>
<td>HIST 201H World History (Honors)</td>
<td>PHYS 102 Physical Science Survey II (4 credits)</td>
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<td>HIST 202 World History</td>
<td>PHYS 106 Intro. to Physical Geology (4 credits)</td>
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<tr>
<td>HIST 207 American History to 1865</td>
<td>PHYS 107 Historical Geology (4 credits)</td>
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<tr>
<td>HIST 208 American History from 1865</td>
<td>PHYS 110 Weather and Climate (4 credits)</td>
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<td>PHYS 111 Energy and the Environment (4 credits)</td>
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<td>PHYS 120 Astronomy (3 credits)</td>
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<td>PHYS 121 Astronomy Lab (1 credit)</td>
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<table>
<thead>
<tr>
<th>Humanities (3 credit hours)</th>
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<tbody>
<tr>
<td>ART 100 Art Appreciation</td>
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<tr>
<td>COMM 140 Film Appreciation</td>
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<td>COMM 140H Film Appreciation (Honors)</td>
<td>BA 210 Business Law</td>
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<tr>
<td>ENGL 150 Introduction to Literature</td>
<td>BA 312 Personal Finance</td>
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<tr>
<td>ENGL 150H Introduction to Literature (Honors)</td>
<td>ECON 101 American Economy</td>
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<tr>
<td>MUSC 104 American Music A Panorama</td>
<td>POSC 100 Introduction to Government and Politics</td>
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<td>POSC 101 American NationI Government</td>
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<tr>
<td>Wellness (2 credit hours)</td>
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<tr>
<td>HHP 122 Fitness for Living</td>
<td>PSYC 151 General Psychology</td>
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<tr>
<td>HHP 157 Healthy Living</td>
<td>SOC 101 Introduction to Sociology</td>
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<tr>
<td>HHP 157H Healthy Living (Honors)</td>
<td>SOC 305 Birth Death and Migration</td>
</tr>
<tr>
<td>HHP 242 Team Sports II</td>
<td>EDUC 201 Human Growth and Development</td>
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### Degree Requirements & Graduation

Students are responsible for knowing and fulfilling requirements for graduation. Accordingly, they should carefully read the catalog and curriculum requirements. If questions arise about requirements, students should consult with the appropriate department chair, college dean or the Registrar several semesters prior to graduation. See below listed requirements for Graduation and consult your respective year WVSU Academic Catalog.

1. A cumulative grade point average of 2.0 (i.e., a C average) on all work attempted with the exception of developmental courses and courses with grades of P, K, W, and AUD.
2. A cumulative grade point average of 2.0 in major and minor (if applicable) courses. The department will identify the courses that count toward the major and the major cumulative grade point average.
3. Completion of the total number of hours required in the curriculum elected.
4. The necessary residence requirement for a degree.
5. Payment of all outstanding financial obligations to the University.
6. All grades of I and Q must be satisfied before graduation.

Rev. August, 2019