Bachelor of Science in Biochemistry  
Degree Requirements  
(For students declaring biochemistry as their major spring quarter 2012 or later)

1) Mathematics  
Regular or Honors
- 124 (5)  134 (5)
- 125 (5)  135 (5)
- 126 (5)  136 (5)

2) Physics  
Calculus-based or Algebra-based
- 121 (5)  114 (4)
- 122 (5)  115 (4)
- 123 (5)  116 (4)

The calculus-based series is recommended.

3) General Chemistry  
Regular or Honors
- 142 (5)  145 (5)
- 152 (5)  155 (5)
- 162 (5)  165 (5)

4) Organic Chemistry  
Regular or Honors
- 237 (4)  335 (4)
- 238 (4)  336 (4)
- 239 (3)  337 (4)

Laboratory
- 241 (3)  346 (3)
- 242 (3)  347 (3)

Organic laboratory begins with the second lecture course.

5) Biology  
- 180 (5)
- 200 (5)

6) Biochemistry  
- 440 (4)
- 441 (4)
- 442 (4)
- 426 Laboratory (4)

(Students may petition research experience be used for exemption from Bioc 426 lab. Consult advisers.)

7) Genome Science  
- Genome 371 (5) or Genome 361 (3)

8) Physical Chemistry  
Pchem for Biochemists or Regular
- 452 (3)  455 (3)
- 453 (3)  456 (3)
- 457 (3)

9) Science Electives  
Eleven credits from courses on the following list are required.
- AMATH 351 (3)*  CHEM 458 (3)
- AMATH 352 (3)*  CHEM 460 (3)
- AMATH 410  CHEM 461 (3)
- BIOL 220 (5)  CHEM 462 (2 or 3)
- BIOL 401 (5)  CHEM 463 (2)
- BIOL 402 (3)  CHEM 465 (3)
- BIOL 411 (4)  GENOME 372 (5)
- BIOL 412 (3)  GENOME 373 (5)
- CHEM 312 (3)  GENOME 411 (5)
- CHEM 317 (4)  IMMUN 441 (4)
- CHEM 321 (5)  MATH 307 (3)*
- CHEM 410 (2)  MATH 308 (3)*
- CHEM 416 (3)  MICROM 402 (3)
- CHEM 417 (3)  MICROM 410 (3)
- CHEM 418 (3)  MICROM 411 (5)
- CHEM 419 (3)  MICROM 412 (3)
- CHEM 426 (3)  MICROM 431 (3)
- CHEM 429 (3)  NBIO 404 (3)
- CHEM 436 (3)  OCEAN 400 (4)

- Up to 9 credits of advanced undergraduate research may count toward this requirement. Research conducted outside Chemistry or Biochemistry must first be approved by one of the undergraduate advisers.
- Additional 400 level science courses may be considered for science electives after consultation and a petition is submitted to the biochemistry advisers.
- *Credit not allowed for both Math 307 and Amath 351 or for both Math 308 and Amath 352 toward science elective requirement.
### 10) Model Schedule

<table>
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<tr>
<th>Year</th>
<th>AUTUMN</th>
<th>WINTER</th>
<th>SPRING</th>
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<tbody>
<tr>
<td>1st</td>
<td>Math 124 (5)</td>
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<td>Math 126 (5)</td>
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<td>Chem 142 (5)</td>
<td>Chem 152 (5)</td>
<td>Chem 162 (5)</td>
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<td>F L 102 (5)</td>
<td>F L 103 (5)</td>
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<td>Electives (2)</td>
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<tr>
<td>2nd</td>
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<td>Biol 200 (5)</td>
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<td>Chem 238 (4)</td>
<td>Chem 242 (3)</td>
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<td>Electives (7)</td>
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<td>English Comp (5)*</td>
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<td>I &amp; S (5)*</td>
<td>VLPA (5)</td>
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<tr>
<td>3rd</td>
<td>Bioc 440 (4)</td>
<td>Bioc 441 (4)</td>
<td>Bioc 442 (4)</td>
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<td>Phys 121 (5)</td>
<td>Phys 122 (5)</td>
<td>Phys 123 (5)</td>
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<td>I &amp; S (5)*</td>
<td>VLPA (5)*</td>
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<td>4th</td>
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<td>I&amp;S “W” (5)</td>
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<td>Genome 361 (3)</td>
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<td>Science Electives (8)</td>
<td>VLPA (5)*</td>
<td>I &amp; S (5)*</td>
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<tr>
<td></td>
<td></td>
<td>Electives (5)</td>
<td>Electives (3)</td>
</tr>
</tbody>
</table>

*Visual, Literary and Performing Arts (VLPA) & Individuals and Societies (I&S).

Students are strongly encouraged to include undergraduate research in their curricula. Chem 299 and 499 can replace the “W” credits shown.

Students are expected to understand and complete all general education requirements as detailed in the General Catalog and on-line at [http://www.washington.edu/students/ugrad/advising/ged/#A&Sgened](http://www.washington.edu/students/ugrad/advising/ged/#A&Sgened). Undergraduate advisers can help set up individual schedules according to students’ needs and constraints.

Note that registration for BIOC 426 is restricted during period 1 registration to seniors who have applied to graduate.

### 11) Major Credit and Grade Point Checklist

- Biochemistry degree requires **195 credits**.
  
  *NOTE: Model Schedule (item #10) plans for up to 18 credits per quarter, which is above the standard 15. Students’ credit loads may vary. Time to degree completion will vary on a case-by-case basis.*

- A minimum grade of **2.0** and a cumulative major GPA of **2.50** are required for all CHEM, BIOL, & BIOC courses counted toward the major.

- A minimum cumulative GPA of **2.50** is required in the BIOC 440, 441, 442 sequence.

- An overall cumulative grade point average of **2.50** is also required.

- All required courses must be taken for a decimal grade, unless only offered on a CR/NC basis.

**STUDENTS WHO HAVE DECLARED BIOCHEMISTRY PRIOR TO SPRING QUARTER 2012 MAY CHOOSE TO FOLLOW THE DEGREE REQUIREMENTS THAT WERE IN EFFECT PRIOR TO SPRING QUARTER 2012.**

5/2012