

# Bachelor of Science in Chemistry- ACS Certified Degree Requirements

(For students declaring chemistry as their major Spring quarter 2010 or later)

## 1) Mathematics (MATH)

- a) Calculus or Honors Calculus  
 124 (5 credits)     134 (5)  
 125 (5)             135 (5)  
 126 (5)             136 (5)
- b) Two additional math courses above the 200 level are required if the regular calculus sequence is taken. **Recommended are:**  
 307 (3) or  AMATH 351 (3)  
 308 (3) or  AMATH 352 (3)

## 2) Physics (PHYS)

- a) Calculus-based or Algebra-based  
 121 (5)             114 (4)  
 122 (5)             115 (4)  
 123 (5)             116 (4)
- The calculus-based series is recommended.  
NOTE: One credit lab is included with each course in the calculus-based physics series.

- b) One credit of laboratory  
 117, 118, 119 (1)

## 3) General Chemistry (CHEM)

- Regular or Advanced or Honors  
 142 (5)     144 (5)     145 (5)  
 152 (5)     154 (5)     155 (5)  
 162 (5)     164 (5)     165 (5)

## 4) Analytical Laboratory (CHEM)

- 321 Quantitative Analysis (5)  
 426 Instrumental Analysis (3)

## 5) Inorganic Chemistry (CHEM)

- 312 Lecture (3)  
 317 Laboratory (4)  
 416 Transition Metals Lecture (3)
- Students completing 155 and 165 are exempt from CHEM 312.

## 6) Organic Chemistry (CHEM)

- a) Regular or Honors  
 237 (4)             335 (4)  
 238\* (4)           336 (4)  
 239 (3)             337 (4)
- b) Laboratory  
 241 (3)             346 (3)  
 242 (3)             347 (3)
- \*Organic laboratory begins with 2nd organic lecture.

## 7) Physical Chemistry (CHEM)

- 455 (3)  
 456 (3)  
 457 (3)  
 461 (3)

## 8) Biochemistry (BIOC)

- 405 (3) \*

## 9) Advanced Chemistry

The two parts of this requirement must total a minimum of **5 credits**:

- a)  Choose one 400 level lab from the following:  
    \_\_\_ 462 Organic Synthesis (2 or 3)  
    \_\_\_ 463 Spectroscopy (2)  
    \_\_\_ 465 Computations in Chemistry (3)
- b)  Additional 400-level CHEM/BIOC courses (**EXCEPT** CHEM 498), not previously mentioned, taken for a numerical grade.

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Honors students only may apply Chem 399 or 499 for Part B.

*\*Students should contact chemistry advising regarding prerequisite alternatives for BIOC 405.*