Department of Chemistry and Biochemistry (May 2018)

**Chemistry Major CC (14.50)**

**First Year**

CH107, CH108  
MA126, MA129

**Second and Third Year**

PC241, PC242  
CH250: Organic I  
CH241: Analytical  
CH275: Inorganic I  
CH366: Physical I or CH365 Biophysical  
CH382 (requires CH251): Biochemistry I

One of these courses can be replaced by an additional upper-level course in a sub discipline or cognate discipline.

**Fourth Year**

*Three In-Depth Courses:* can be from any specific sub discipline or a mixture of organic, inorganic, analytical, or physical

CH201/300-level research\(^a\)/400-level research\(^b\)  
CH251 (before CH382): Organic II  
CH342: Instrumental  
CH351: Organic III  
CH367: Physical II  
CH383: Biochemistry II  
CH475: Inorganic II  
CH480: Advanced Metabolism (with lab)

Upper-level courses in cognate disciplines (with significant lab hours) may also be approved by the Department.

CH490: Senior Seminar is Required

\(^a\) from 301, 302, 303, 304 or 305  
\(^b\) from 401, 402, 403, 404 or 405

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**ACS Certified Chemistry Major (15.50)**

**First Year**

CH107, CH108  
MA126, MA129

**Second and Third Year**

PC 241, PC242  
CH250: Organic I  
CH251 (before CH382): Organic II  
CH241: Analytical  
CH275: Inorganic  
CH366: Physical or CH365 Biophysical  
CH382 (requires CH251): Biochemistry I

**Fourth Year**

*Three In-Depth Courses:* can be from any specific sub discipline or a mixture of organic, inorganic, analytical, or physical

CH201/300-level research\(^a\)/400-level research\(^b\) (with paper)  
CH342: Instrumental  
CH351: Organic III  
CH367: Physical II  
CH383: Biochemistry II  
CH475: Inorganic II  
CH480: Advanced Metabolism (with lab)

Upper-level courses in cognate disciplines (with significant lab hours) may also be approved by the Department.

CH490: Senior Seminar is Required
**Biochemistry Major CC**  
(16.50)  
First Year

CH107, CH108  
MA126, MA129  
MB131  

Second and Third Year  
PC241, PC242  
MB201: (Lab in Cell and Genetics)  
CH250: Organic I  
CH251: Organic II  
CH382 (requires CH251): Biochemistry I  
CH241: Analytical OR CH366/365: Physical  
OR CH275: Inorganic I  

Fourth Year  
CH383: Biochemistry II  
CH201/300-level researcha/400-level researchb or MB399 (with Department approval):  

Two In-Depth Courses:  
In Biochemistry/Chemistry or Cognate disciplines with significant lab component  
May be chosen from the following:  

CH342: Instrumental  
CH351: Organic III  
CH367: Physical II  
CH400: Topics courses upon approval  
CH475: Inorganic II  
CH480: Advanced Metabolism (with lab)  
BE344: SEM  
BE345: TEM  
MB350-Special Topics Lab Research  
MB355-Laboratory Advanced Genetics  
MB360-Laboratory in Molecular Bio  

Other upper-level courses in cognate disciplines (with significant lab hours) may also be approved.  

CH490: Senior Seminar is Required  

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**ACS Certified Biochemistry Major**  
(16.50)  
First Year

CH107, CH108  
MA126, MA129  

Second and Third Year  
PC241, PC242  
CH250: Organic I  
CH251: Organic II  
CH382 (requires CH251): Biochemistry I  
CH275: Inorganic I  
CH241: Analytical  
CH366/365: Physical  

Fourth Year  
CH383: Biochemistry II  
CH201/300-level researcha/400-level researchb with Paper or MB399 (with Department approval):  

Two In-Depth Courses:  
In Biochemistry/Chemistry or Cognate disciplines with significant lab component  
May be chosen from the following:  

CH342: Instrumental  
CH351: Organic III  
CH367: Physical II  
CH400: Topics courses upon approval  
CH475: Inorganic II  
CH480: Advanced Metabolism (with lab)  
BE344: SEM  
BE345: TEM  
BE366: Comparative Animal Physiology  
MB350-Special Topics Lab Research  
MB355-Laboratory Advanced Genetics  
MB360-Laboratory in Molecular Bio  

Other upper-level courses in cognate disciplines (with significant lab hours) may also be approved.  

CH490: Senior Seminar is Required  

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a from 301, 302, 303, 304 or 305  
b from 401, 402, 403, 404 or 405