

**Department of Chemistry and  
Biochemistry (Nov 2021)**

**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  
CH266: Fundamentals of Physical  
Chemistry or CH 365: 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<sup>a</sup>/400-level  
research<sup>b</sup>  
CH251 (before CH382): Organic II  
CH342: Instrumental  
CH351: Organic III  
CH366: Physical I  
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

<sup>a</sup> from 301, 302, 303, 304 or 305

<sup>b</sup> from 401, 402, 403, 404 or 405

**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  
CH266: Fundamentals of Physical  
Chemistry 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<sup>a</sup>/400-level  
research<sup>b</sup> (with paper)  
CH342: Instrumental  
CH351: Organic III  
CH366: Physical I  
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* CH266:

Fundamentals of Physical Chemistry *OR*

CH275: Inorganic I

**Fourth Year**

CH383: Biochemistry II

CH201/300-level research<sup>a</sup>/400-level research<sup>b</sup> 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

CH 366: Physical I

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

<sup>a</sup> from 301, 302, 303, 304 or 305

<sup>b</sup> from 401, 402, 403, 404 or 405

**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

CH266: Fundamentals of Physical Chemistry

**Fourth Year**

CH383: Biochemistry II

CH201/300-level research<sup>a</sup>/400-level research<sup>b</sup> 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

CH 366: Physical I

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