Department of Chemistry and Biochemistry

Chemistry Major CC
(14.50)
First Year
CH107, CH 108
MA126, MA 129

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

One of these courses can be replaced by an additional upper level course in a subdiscipline 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
CH201/301/401: Research
CH 251 (before CH382): Organic II
CH342: Instrumental
CH351: Organic III
CH367: Physical II
CH383: Biochemistry II
CH475: Inorganic II

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

CH490: Seminar Course is Required

ACS Certified Chemistry Major
(15.50)
First Year
CH107, CH 108
MA126, MA 129

Second and Third Year
PC 241, PC242
CH250: Organic
CH 251 (before CH382): Organic II
CH241: Analytical
CH275: Inorganic
CH366: Physical or CH365 Biophysical
CH382 (requires CH251):
Biochemistry

Fourth Year
Three In-Depth Courses: can be from any specific sub-discipline or a mixture of organic, inorganic, analytical, or physical
CH201/301/401: Research (with paper)
CH342: Instrumental
CH351: Organic III
CH367: Physical II
CH383: Biochemistry II
CH475: Inorganic II

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

CH490: Seminar Course is Required
**Biochemistry Major CC**

*First Year*

- CH107, CH 108
- MA126, MA 129
- BY 131

*Second and Third Year*

- PC241, PC242
- BY 231: Genetics (requires BY131)
- CH250: Organic I
- CH251: Organic II
- CH382 (requires CH251): Biochemistry
- CH241: Analytical OR CH366: Physical
  OR CH365: Biophysical

*Fourth Year*

- CH383: Biochemistry II

*Three* In-Depth Courses: 
In biochemistry or molecular biology or a mixture of biochemistry, organic, inorganic, analytical, or physical or upper level molecular courses in biology with significant lab component. May be chosen from the following:

- CH201/301/401: Research
- CH342: Instrumental
- CH351: Organic III
- CH367: Physical II
- CH400: Topics courses upon approval
- CH475: Inorganic II
- CH483: Advanced Metabolism (with lab)
- BY304: Immunology (with lab)
- BY344: SEM
- BY345: TEM
- BY363: Virology
- BY366: Comparative Animal Physiology
- BY380: Advanced Cell Biology
- BY440: Topics courses upon approval

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

CH490: Seminar Course is Required

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**ACS Biochemistry Major**

*First Year*

- CH107, CH 108
- MA126, MA 129

*Second and Third Year*

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

*Fourth Year*

- CH383: Biochemistry II

*Three* In-Depth Courses: 
In biochemistry or molecular biology or a mixture of biochemistry, organic, inorganic, analytical, or physical or upper level molecular courses in biology with significant lab component. May be chosen from the following:

- CH201/301/401: Research (with paper)
- CH342: Instrumental
- CH351: Organic III
- CH367: Physical II
- CH400: Topics courses upon approval
- CH475: Inorganic II
- CH483: Advanced Metabolism (with lab)
- BY304: Immunology (with lab)
- BY344: SEM
- BY345: TEM
- BY363: Virology
- BY366: Comparative Animal Physiology
- BY380: Advanced Cell Biology
- BY440: Topics courses upon approval

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

CH490: Seminar Course is Required