## BA in Chemistry

2014 - 2015 Catalog  
**Total Credit Hours Required:** 120  
**Advanced Credit Hours Required:** 36 (3000 level or above)

### Required Chemistry Courses

**General Chemistry**
- 1441 General Chemistry I and Lab
- 1442 General Chemistry II and Lab (Prereq: CHEM 1441)

**Organic Chemistry**
- 2321 Organic Chemistry I (Prereq: CHEM 1442)
- 2181 Organic Chemistry I Lab (Coreq: CHEM 2321)
- 2322 Organic Chemistry II (Prereq: CHEM 2321)
- 2182 Organic Chemistry II Lab (Coreq: CHEM 2322)

**Quantitative Chemistry**
- 2335 Quantitative Chemistry (Prereq: CHEM 1442)
- 2285 Quantitative Chemistry Lab (Coreq: CHEM 2335)

**Physical Chemistry**
- 3315 Biophysical Chemistry I (Prereq: CHEM 2335, 8 hours physics, MATH 2425)
- 3175 Biophysical Chemistry I Lab (Coreq: CHEM 3315)

**Inorganic Chemistry**
- 3317 Inorganic Chemistry I (Pre/Coreq: CHEM 2322)

**Biochemistry**
- 4311 General Biochemistry I (Prereq: CHEM 2322)

**Other Chemistry**
- 4101 Seminar in Chemistry

**Additional Chemistry**
- 2-3 hours from:
  - 3307 Intro to Polymer Chemistry (Prereq: CHEM 2322)
  - 4242 Lab Techniques in Biochemistry (Prereq: CHEM 4311)
  - 4312 General Biochemistry II (Prereq: CHEM 4311)
  - 4318 Inorganic Chemistry II (Prereq: CHEM 2322)
  - 4346 Advanced Synthetic Methods
    (Prereq: 2322, 2182, 3317/4318)

### Other Required Courses

**English**
- 1301 Critical Thinking, Reading, and Writing I  
- 1302 Critical Thinking, Reading, and Writing II

**Language, Philosophy, and Culture**
- 3 hours of an approved course (see Catalog)

**Social and Behavioral Sciences**
- 3 hours of an approved course (see Catalog)

**Creative Arts**
- 3 hours of an approved course (see Catalog)

**Political Science**
- 2311 Government of the United States
- 2312 State and Local Government

**History**
- 1311 History of the United States (→1865)
- 1312 History of the United States (1865→)

**Foundational Component Area**
- 3 hours of an approved course (see Catalog)

**Computer Competency**
- CSE 1301 or passing score on Computer Skills Placement Test

**Mathematics**
- 1323 Precalculus II
- 1426 Calculus I
- 2425 Calculus II

**Physics**
- 1441 General College Physics I (Prereq: hs algebra/trig)
- 1442 General College Physics II (Prereq: PHYS 1441)

**Other Natural Science**
- 6-8 hours of biology or 6-8 hours of geology

**Modern and Classical Languages**
- 14 hours in a single modern/classical language  
or
- 8 hours in a single language and 6 advanced hours from one Liberal Arts Area Cluster (per COS list)

**Electives**
- Sufficient to reach 120 total credit hours  
- Sufficient to reach 36 advanced hours

### Undergraduate Advisor

Charu Gupta  
Chemistry and Physics Building Room 130  
Phone: (817) 272 - 3171  
Fax: (817) 272 - 3808

Department of Chemistry and Biochemistry

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Math, Physics, and Chemistry Pre- and Corequisites Flow Chart (grade of “C” or better is required to meet prerequisites)

Suggested Course Sequence

First Year:
- **Fall – 14 credit hours**
  - CHEM 1441
  - MATH 1323
  - ENGL 1301
  - BIOL 1441 or GEOL 1425

- **Spring – 15 credit hours**
  - CHEM 1442
  - MATH 1426
  - ENGL 1302
  - BIOL 1442 or GEOL 1426

Second Year:
- **Fall – 15 credit hours**
  - MATH 2425
  - PHYS 1441
  - Language, Philosophy, and Culture
  - CHEM 2321 and 2181

- **Spring – 17 credit hours**
  - Modern/Classical Language
  - CHEM 2335 and 2285
  - CHEM 2322 and 2182

Third Year:
- **Fall – 17 credit hours**
  - Modern/Classical Language
  - CHEM 3315 and 3175
  - Advanced Elective
  - POLS 2311
  - Social and Behavioral Sciences

- **Spring – 15 credit hours**
  - Modern/Classical Language
  - Advanced Elective
  - CHEM 4311
  - POLS 2312
  - Foundational Component Area

Fourth Year:
- **Fall – 13 credit hours**
  - CHEM 4101
  - CHEM 3317
  - HIST 1311
  - Advanced Electives
  - Modern/Classical Language

- **Spring – 14 credit hours**
  - CHEM from approved list (2-3 hrs)
  - HIST 1312
  - Computer Competency
  - Advanced Electives
  - Creative Arts

*Minimum GPA Required: 2.25 in CHEM, 2.25 in COS, and 2.25 Overall.

NOTE: For a thorough explanation of degree requirements please consult the Undergraduate Catalog.