University College
General Education Requirements

Foundations

English Composition (6 Units, see Note 1)  

Second Language (8 Units, see Note 3)  

Tier One*

Traditions & Cultures (2 Courses)  

Individuals & Societies (2 Courses)  

Tier Two*

Arts (1 Course)  

Individuals & Societies (1 Course)  

Humanities (1 Course)  

Mid-Career Writing Assessment (Note 4)

*One course from the Tier 1 or Tier 2 menus must focus on non-western cultures or on race, gender, class, or ethnicity.

College of Science
Chemistry Option Major Requirements

Science Education Courses (STCH)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>250</td>
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<td>310</td>
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<tr>
<td>410</td>
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<tr>
<td>420</td>
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</tr>
<tr>
<td>494A</td>
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<td>496A</td>
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LRC 416 | (3)  
CHEM 439 | (3)

Chemistry**

<table>
<thead>
<tr>
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<td>152</td>
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<tr>
<td>246A</td>
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<td>246B</td>
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<td>247A</td>
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<td>247B</td>
<td></td>
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<td>325</td>
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<td>326</td>
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<td>405</td>
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Electives*** | (11)  

Math****

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<td>125</td>
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Physics

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<td>141</td>
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<td>241</td>
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Other Electives**** (12 Units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
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</table>

**Courses in the major satisfy the Tier 1 & Tier 2 Natural Sciences requirements.  
****11 units of Chemistry to be chosen in consultation with the advisor from CHEM 300 to 499.  
*****There are two possible sequences for the two courses in calculus: 124-129 and 125-129. Both satisfy the foundations requirement in mathematics.  
******12 units of other electives must be earned by choosing from the following: MCB 181R, 181L, 182; ECOL 302; MCB 320, 321; ECOL 479; GEOS 251, 256, 302, 306; PHYS 242,381, 430,433; PHIL 305, 420, 427; or other courses if approved by advisor.  

Notes for BSC Degree

NOTE: 42 Upper-Division Units (course number >300) are required for graduation. These units can be taken from any departments. To satisfy this requirement with minimum difficulty, it is strongly recommended that as many study areas courses as possible be taken as upper-division classes.
Note 1. English Composition

Depending on placement in the English Proficiency Test, one of the following sequences must be taken:

A. English 100, 101, and 102
B. English 101 and 102 (or 107 and 108)
C. English 103H and 104H (or with AP credit, ENGL 109H)

Note 2. First and Second Year Courses

Chemistry majors who have taken high school chemistry and physics and are enrolled in Math 124 in their first semester are strongly encouraged to take Chem 105A/B and Chem 106A/B rather than Chem 151 and 152. Chem 105A/B (lecture) and Chem 106A/B (lab) are honors courses for well prepared students. Chem 242A/B and 244A/B are the corresponding second year honors organic chemistry courses. These classes are small, faculty contact is extensive, and laboratory projects are individualized and challenging. If there is a scheduling problem, preventing the student from completing CHEM 246 A/B or 247A/B, the student may enroll in Chem 241A/B and Chem 243A/B instead with an advisor’s approval.

Note 3. Second Language

The College of Science accepts any language for this requirement. The Department of Chemistry suggests German for a professional degree. Premed students majoring in chemistry frequently satisfy this requirement by taking Spanish. Two semesters of a second language are currently required for the B.S. degree. Please refer to the University General Catalog for further details regarding the foreign language requirements for your program.

Note 4. Mid Career Writing Assessment

Students must complete the Mid-Career Writing Assessment (MCWA) requirement, which consists of obtaining a grade of "B" or better in second semester English Composition (ENGL 102, 104, or 108), prior to enrolling in Chemistry 400A (Instrumental Analysis) and Chemistry 400B (Chemical Measurements) which are the Department of Chemistry's writing emphasis courses. Students receiving an unsatisfactory grade must consult their major advisor.

Note 5.

Please note that certain courses are offered only once a year in the semester shown in the UA Catalog. It is therefore imperative that the prerequisite or co-requisite courses be scheduled and completed prior to the semester these classes are offered. Failure to do this may result in delay of graduation.
2009-2010 Finish in Four! ACADEMIC PLAN
MAJOR Science Education: Chemistry (BSC)
THIS SAMPLE PROGRAM SHOULD NOT BE FOLLOWED WITHOUT
CONSULTATION WITH THE DEPARTMENT ADVISOR.

<table>
<thead>
<tr>
<th>Freshman Year</th>
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<tr>
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<tr>
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<td>Indv</td>
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<td>CHEM 151</td>
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<td>CHEM 247a</td>
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**TOTAL UNITS:** 120

NOTES:
1 CHEM majors who have taken high school CHEM and PHYS and are enrolled in MATH 124 in their first semester are strongly encouraged to take CHEM 105a/b and 105a/b rather than CHEM 103a/b and 104a/b. CHEM 105a/b and 106a/b are honors courses for well-prepared students. For more information on the honors courses, see CHEM advisor.
2 Students must have earned a minimum of 42 upper-division units (300-499 level) within their major, general education requirements, or electives to be eligible for graduation.
# One course in a student’s degree program must focus on non-western culture or gender/race/ethnicity/class.
-- Students who do not demonstrate second-semester proficiency in a second language at entrance will be required to complete up to two courses (4-8 units) in a second language. This coursework would be best completed in the freshman year and would reduce the number of electives needed.
--- The Mid-career Writing Assessment requirement must be completed prior to graduation.

For more information, contact the department at 621-6354