

## Program Completion Plan (Eight Semester Plan)

Department: Chemistry Degree: BS  
 Program/Major: Chemistry  
 Track/Emphasis: ACS Certified: Biochemistry  
 Does this program require a minor? (Yes/No) No

Important program information in the online *Undergraduate Bulletin*:

UCA Core Requirements: <http://uca.edu/ubulletin2013/general-policies-information/uca-core/>  
 Degree Requirements: <http://uca.edu/ubulletin2013/general-policies-information/degree-requirements/>  
 Program Description: <http://uca.edu/ubulletin2013/colleges-departments-programs/college-of-natural-sciences-and-mathematics/departments-of-chemistry/>  
 Course Descriptions: <http://uca.edu/ubulletin2013/courses/>

This degree program requires a total of **120** semester credit hours, including at least 40 upper-division credit hours.

Comparable courses in the Arkansas Course Transfer System (ACTS) are cross-referenced in the ACTS column of each semester block below; a [core link](http://uca.edu/go/ubulletin-ldcore/) (<http://uca.edu/go/ubulletin-ldcore/>) takes the user to the *Undergraduate Bulletin's* UCA Core page, where UCA Core options and ACTS course numbers are listed in full; an [acts link](http://uca.edu/go/acts/) takes the user to the *Undergraduate Bulletin's* ACTS page (<http://uca.edu/go/acts/>) for additional information and a full UCA-ACTS crosswalk.

### Year 1

#### Fall – Semester 1 (credit hours: 17)

| SUBJ | NUM  | TITLE                           | SCH | ACTS                      |
|------|------|---------------------------------|-----|---------------------------|
| CHEM | 1450 | College Chem I                  | 4   | <a href="#">CHEM1414</a>  |
| MATH | 1496 | Calculus I                      | 4   | <a href="#">MATH2405</a>  |
|      |      | UCA Core Course <sup>1</sup>    | 3   | <a href="#">core link</a> |
| WRTG | 1310 | Introduction to College Writing | 3   | <a href="#">ENGL1013</a>  |
|      |      | UCA Core Course <sup>1</sup>    | 3   | <a href="#">core link</a> |

#### Spring – Semester 2 (credit hours: 15)

| SUBJ | NUM  | TITLE                         | SCH | ACTS                     |
|------|------|-------------------------------|-----|--------------------------|
| CHEM | 1451 | College Chem II               | 4   | <a href="#">CHEM1424</a> |
| MATH | 1497 | Calculus II                   | 4   | <a href="#">MATH2505</a> |
| BIOL | 1440 | Principles of Biology I       | 4   | <a href="#">BIOL1014</a> |
| WRTG | 1320 | Academic Writing and Research | 3   | <a href="#">ENGL1023</a> |

**Year 2****Fall – Semester 3 (credit hours: 15)**

| SUBJ | NUM  | TITLE                        | SCH | ACTS                      |
|------|------|------------------------------|-----|---------------------------|
| CHEM | 2401 | Organic Chemistry I          | 4   |                           |
| BIOL | 1441 | Principles of Biology II     | 4   |                           |
| MATH | 2471 | Calculus III                 | 4   | <a href="#">MATH2603</a>  |
|      |      | UCA Core Course <sup>1</sup> | 3   | <a href="#">core link</a> |

**Spring – Semester 4 (credit hours: 16)**

| SUBJ | NUM  | TITLE                        | SCH | ACTS                      |
|------|------|------------------------------|-----|---------------------------|
| CHEM | 3411 | Organic Chemistry II         | 4   |                           |
| CHEM | 3211 | Organic Spectroscopy         | 2   |                           |
| PHYS | 1441 | University Physics 1         | 4   | <a href="#">PHYS2034</a>  |
|      |      | UCA Core Course <sup>1</sup> | 3   | <a href="#">core link</a> |
|      |      | UCA Core Course <sup>1</sup> | 3   | <a href="#">core link</a> |

**Year 3****Fall – Semester 5 (credit hours: 15)**

| SUBJ | NUM  | TITLE                        | SCH | ACTS                      |
|------|------|------------------------------|-----|---------------------------|
| CHEM | 3520 | Quantitative Analysis        | 5   |                           |
| CHEM | 4320 | Biochemistry I               | 3   |                           |
| PHYS | 1442 | University Physics 2         | 4   | <a href="#">PHYS2044</a>  |
|      |      | UCA Core Course <sup>1</sup> | 3   | <a href="#">core link</a> |

**Spring – Semester 6 (credit hours: 14)**

| SUBJ | NUM  | TITLE                        | SCH | ACTS                      |
|------|------|------------------------------|-----|---------------------------|
| CHEM | 4335 | Biochemistry II              | 3   |                           |
| BIOL | 2490 | Genetics                     | 4   |                           |
| CHEM | 4121 | Biochemistry Lab             | 1   |                           |
|      |      | UCA Core Course <sup>1</sup> | 3   | <a href="#">core link</a> |
|      |      | General Elective             | 3   |                           |

**Year 4****Fall – Semester 7 (Credit hours: 15)**

| SUBJ | NUM  | TITLE   | SCH | ACTS |
|------|------|---|-----|------|
| BIOL | 3420 | General Microbiology  | 4   |      |
| CHEM | 4450 | Physical Chemistry I  | 4   |      |
|      |      | Upper Division General Elective                                     | 3   |      |
| CHEM |      | Research <sup>2</sup>   | 1   |      |
|      |      | Inorganic Chemistry <sup>3</sup> or Upper Division General Elective | 3   |      |

**Spring – Semester 8 (Credit hours: 13)**

| SUBJ | NUM  | TITLE   | SCH | ACTS |
|------|------|---|-----|------|
| CHEM | 4112 | Seminar   | 1   |      |
|      |      | General Elective  | 1   |      |
| CHEM |      | Research <sup>2</sup>   | 1   |      |
|      |      | Inorganic Chemistry <sup>3</sup> or Upper Division General Elective | 3   |      |
| CHEM | 4460 | Physical Chemistry II   | 4   |      |
|      |      | General Elective  | 3   |      |

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 SIGNED – DEPARTMENT CHAIR

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 DATE

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 SIGNED – COLLEGE DEAN

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 DATE

**To be completed by the advisor when an Eight-Semester Plan is accepted by the student:**

**If applicable, has student selected a minor? Type “x” as appropriate. \_\_\_\_\_ No \_\_\_\_\_ Yes**

**If “yes,” specify: \_\_\_\_\_**

### Notes

<sup>1</sup> See appropriate choices, alternatives, or substitutions under “UCA Core” in the *Undergraduate Bulletin*. During the first year, a student must complete a UCA Core course designated as a First-Year Seminar (FYS) in Critical Inquiry, Diversity, or Responsible Living. The student will also need to complete major or general elective courses designated as fulfilling the upper-division and capstone requirements of the UCA Core.

<sup>2</sup> Students must take at least two hours of research.

<sup>3</sup> Students must take either CHEM 3360 (Intermediate Inorganic Chemistry) or CHEM 4380 (Advanced Inorganic Chemistry).