Academic Map: Environmental Science, Chemistry

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Department:** | Chemistry | | **Degree:** | BS |
| **Program/Major:** | Environmental Science | |  |  |
| **Track/Emphasis:** | Chemistry | |  |  |
| **Does this program require a minor? (Yes/No)** | | No |  | |

**Important program information in the online *Undergraduate Bulletin*:**

|  |  |
| --- | --- |
| **UCA Core Requirements:** | <http://uca.edu/ubulletin2015/general-policies-information/uca-core/> |
| **LD Core Check Sheet:** | <http://uca.edu/ubulletin/ldcore/> |
| **Degree Requirements:** | <http://uca.edu/ubulletin2015/general-policies-information/degree-requirements/> |
| **Program Description:** | <http://uca.edu/ubulletin2015/colleges-departments-programs/interdisciplinary-programs/environmental-science#sec0203> |
| **Course Descriptions:** | <http://uca.edu/ubulletin2015/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/ubulletin/ldcore/) (http://uca.edu/ubulletin/ldcore/) takes the user to the *Undergraduate Bulletin*’s UCA Lower-Division Core check sheet, where UCA Core options and ACTS course numbers are listed in full; an [acts link](http://uca.edu/ubulletin/arkansas-course-transfer-system/) takes the user to the *Undergraduate Bulletin*'s ACTS page (http://uca.edu/ubulletin/arkansas-course-transfer-system/) for additional information and a UCA-ACTS crosswalk.

Year 1

Fall – Semester 1 (credit hours: 14)

| SUBJ | NUM | TITLE | SCH | ACTS |
| --- | --- | --- | --- | --- |
| CHEM | 1450 | College Chemistry | 4 | CHEM1414 |
| WRTG | 1310 | Introduction to College Writing | 3 | ENGL1013 |
|  |  | LD UCA Core Course1 | 3 | [core link](http://uca.edu/ubulletin/ldcore/) |
| MATH | 1496 | Calculus I | 4 | MATH2405 |

Spring – Semester 2 (credit hours: 17)

| SUBJ | NUM | TITLE | SCH | ACTS |
| --- | --- | --- | --- | --- |
| CHEM | 1451 | College Chemistry II | 4 | CHEM1424 |
| WRTG ENGL | 1320 1320 | Academic Writing and Research or Interdisciplinary Writing and Research or Other approved alternative | 3 | ENGL1023 ENGL1023 [core link](http://uca.edu/ubulletin/ldcore/) |
| MATH | 1497 | Calculus II | 4 | MATH2505 |
|  |  | LD UCA Core Course1 | 3 | [core link](http://uca.edu/ubulletin/ldcore/) |
|  |  | LD UCA Core Course1 | 3 | [core link](http://uca.edu/ubulletin/ldcore/) |

Year 2

Fall – Semester 3 (credit hours: 14)

| SUBJ | NUM | TITLE | SCH | ACTS |
| --- | --- | --- | --- | --- |
| CHEM | 2401 | Organic Chemistry I | 4 |  |
| BIOL | 1440 | Biology I | 4 | BIOL1014 |
| PSCI | 1330 | US Government and Politics[[1]](#endnote-1) | 3 | PLSC2003 |
|  |  | LD UCA Core Course1 | 3 | [core link](http://uca.edu/ubulletin/ldcore/) |

Spring – Semester 4 (credit hours: 16)

| SUBJ | NUM | TITLE | SCH | ACTS |
| --- | --- | --- | --- | --- |
| CHEM | 3411 | Organic Chemistry II | 4 |  |
| BIOL | 1440 | Biology II | 4 |  |
|  |  | LD UCA Core Course1 | 3 | [core link](http://uca.edu/ubulletin/ldcore/) |
|  |  | LD UCA Core Course1 | 3 | [core link](http://uca.edu/ubulletin/ldcore/) |
| CHEM | 3211 | Organic Spectroscopy | 2 |  |

Year 3

Fall – Semester 5 (credit hours: 16)

| SUBJ | NUM | TITLE | SCH | ACTS |
| --- | --- | --- | --- | --- |
| CHEM | 3520 | Quantitative Analysis | 5 |  |
| PHYS | 1441 or 1410 | University Physics 1 or  College Physics 1 | 4 | PHYS2034 PHYS2014 |
| GEOG | 1400 | Earth Systems Science | 4 | GEOG2223 |
|  |  | Restricted elective[[2]](#endnote-2) | 3 |  |

Spring – Semester 6 (credit hours: 15)

| SUBJ | NUM | TITLE | SCH | ACTS |
| --- | --- | --- | --- | --- |
| ENVR | 3410 | Environmental Theory and Application[[3]](#endnote-3) | 4 |  |
| PHYS | 1442 1420 | University Physics 2 or College Physics 2 | 4 | PHYS2044 PHYS2024 |
| CHEM | 4451 | Advanced Analytical Chemistry[[4]](#endnote-4) | 4 |  |
|  |  | UD UCA Core Course or General Elective | 3 |  |

Year 4

Fall – Semester 7 (Credit hours: 16)

| SUBJ | NUM | TITLE | SCH | ACTS |
| --- | --- | --- | --- | --- |
| ENVR | 4410 | Environmental Practicum: Capstone | 4 |  |
| GEOG | 3301 | Conservation of Natural Resources | 3 |  |
|  |  | Upper-division restricted elective2 | 3 |  |
|  |  | Upper-division restricted elective2 | 3 |  |
| PSCI | 3320 | Environmental Policy and Regulation | 3 |  |

Spring – Semester 8 (Credit hours: 12)

| SUBJ | NUM | TITLE | SCH | ACTS |
| --- | --- | --- | --- | --- |
| CHEM | 4351 | Environmental Chemistry4 | 3 |  |
| CHEM | 4152 | Environmental Chemistry Laboratory4 | 1 |  |
|  |  | Upper-division restricted elective2 | 1 |  |
|  |  | UD UCA Core Course | 3 |  |
|  |  | UD UCA Core Course or General Elective | 3 |  |
|  |  | General Elective | 1 |  |

|  |  |  |
| --- | --- | --- |
|  |  |  |
| Signed – Department Chair |  | Date |
|  |  |  |
|  |  |  |
| Signed – College Dean |  | 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:** |  | | | | |

1. 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. An approved UCA Core lab science and an approved UCA Core math course should be taken in the first two years if possible. The student will also need to complete major, minor, or general elective courses designated as fulfilling the upper-division and capstone requirements of the UCA Core. Students are encouraged to choose a course in economics to fulfill either Lower Division Core social science category (ECON 2320 or 2321) or their responsible living category (ECON 1310) requirements. [↑](#endnote-ref-1)
2. Restricted elective (at least 10 hours): Choose from either CHEM 3150, CHEM 3360, CHEM 4320, CHEM 4335, CHEM 4380, CHEM 4450, CHEM 4460, BIOL 3403, ENVR 4465, GEOG 4304, GEOG 4305, ECON 3330, and a maximum of 2 credits of research in the College of Natural Science and Mathematics, or 8 hours of courses that count toward a minor in mathematics, biology, physics, or geography. [↑](#endnote-ref-2)
3. Fulfills the Upper Division UCA Core requirement for Diversity and Responsible Living. [↑](#endnote-ref-3)
4. CHEM 4351 and CHEM 4152 are offered spring semester, odd years. Must be taken in semester offered. [↑](#endnote-ref-4)