

# B.S. CHEMISTRY Major w/ minor of choice

A minor is required with this major

Name: \_\_\_\_\_

## REQUIRED CHEMISTRY (38 hrs)\*

(Prerequisites in parentheses)

- \_\_\_\_ CHEM 1450 College Chemistry I #  
\_\_\_\_ CHEM 1451 College Chemistry II (CHEM 1450)  
\_\_\_\_ CHEM 2401 Organic Chemistry I (CHEM 1451)  
\_\_\_\_ CHEM 3411 Organic Chemistry II (CHEM 2401)  
\_\_\_\_ CHEM 3211 Organic Spectroscopy  
(CHEM 2401; pre or co-req CHEM 3411)  
\_\_\_\_ CHEM 3360 Intermediate Organic Chemistry (CHEM 1451)  
**OR** \_\_\_\_ CHEM 4380 Advanced Inorganic  
(Spr. only) (CHEM 4450)  
\_\_\_\_ CHEM 3520 Quantitative Analysis (CHEM 1451)  
\_\_\_\_ CHEM 4450 Physical Chemistry I  
(CHEM 1451, PHYS 1442, MATH 1497)  
\_\_\_\_ CHEM 4460 Physical Chemistry II  
(CHEM 1451, PHYS 1442, MATH 1497)  
\_\_\_\_ CHEM 4320 Biochemistry I (CHEM 3411 and BIOL 1440)  
\_\_\_\_ CHEM 4112 Seminar: Capstone  
(pre or co-req CHEM 4450 or 4460) [UD UCA Core: Z]

**Recommended:** \_\_\_\_ CHEM 4V01 Research (2 credit hours)

## REQUIRED BIOLOGY (4 hrs)

- \_\_\_\_ BIOL 1440 Principals of Biology I ^

## REQUIRED PHYSICS (8 hrs)

- \_\_\_\_ PHYS 1441 University Physics I (MATH 1496)  
\_\_\_\_ PHYS 1442 University Physics II  
(PHYS 1441; pre or co-req MATH 1497)

## REQUIRED MATHEMATICS (12 hrs)

- \_\_\_\_ MATH 1496 Calculus I (MATH 1390, 1392 or MATH 1580)  
\_\_\_\_ MATH 1497 Calculus II (MATH 1496)  
\_\_\_\_ MATH 2471 Calculus III (MATH 1497)

The Minor shown below (STEMteach) is only one example of many different choices available to students. Any Minor can be used to satisfy the requirements of the Chemistry B.S. with Minor.

Requirements for other Minors (e.g. Math, Psychology, Biology, Sociology, Philosophy, etc.) are detailed in the UCA Undergraduate Bulletin.

## FOR STEMteach MINOR (26 hrs)

- \_\_\_\_ STEM 1100 Step 1: Inquiry Approaches to Teaching  
\_\_\_\_ STEM 1101 Step 2: Inquiry-Based Lsn Design (STEM 1100)  
\_\_\_\_ STEM 1301 Knowing and Learning (STEM 1100)  
\_\_\_\_ STEM 2301 Classroom Interactions  
(STEM 1301 & Admission to Teacher Education)  
\_\_\_\_ STEM 3300 Project-Based Instruction  
(STEM 2301 and Admission to Teacher Education)  
\_\_\_\_ STEM 3310 Research Methods in Math and Science  
\_\_\_\_ STEM 4600 Apprentice Teaching [UD UCA Core: Z]  
\_\_\_\_ STEM 4605 Apprentice Teaching Seminar  
(STEM 4600 and 4605 must be taken concurrently)

**Graduation Requirements for the B.S. Degree in Chemistry include • successful completion of a minimum of 120 hours, which must include 40 hours of upper division courses (3000-4000 level), • General Education (LD Core) requirements, and • UD Core requirements.**

***This check sheet is to aid students in class planning, but is not meant to replace any eight semester plan or the undergraduate bulletin. For any questions, check the graduation requirements detailed in the Undergraduate Bulletin.***

**Note:** The UCA STEMteach program is now the path to licensure in science education at the undergraduate level. Alternatively, students may complete a Master of Arts in Teaching (MAT) graduate degree after completion of a BS in Chemistry. Contact UCA's Department of Teaching and Learning for more information. \* A "C" or better grade is required for advancement to subsequent courses.

# Prerequisite: ACT mathematics score of at least 21 or corequisite/prerequisite of MATH 1390.

^ Prerequisites: High school chemistry or CHEM 1301 (or above) and a composite ACT score of 21 or higher OR BIOL 1400 (or 1401 or 1402) and CHEM 1301 (or above) both with a grade of C or higher.