

B.S. Chemistry

Standard Track (ACS Certified) (no minor required)

This checksheet 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.

Name: _____

REQUIRED CHEMISTRY (48 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 3520 Quantitative Analysis (CHEM 1451)
- _____ CHEM 4450 Physical Chemistry I (Fall only) (CHEM 1451, PHYS 1442, MATH 1497)
- _____ CHEM 4460 Physical Chemistry II (Spring only) (CHEM 1451, PHYS 1442, MATH 1497)
- _____ CHEM 4451 Advanced Analytical Chemistry (Spring only) (CHEM 3520)
- _____ CHEM 4380 Advanced Inorganic Chemistry (Spring only) (CHEM 4450)
- _____ CHEM 3150 Advanced Inorganic Laboratory (Spring only) (CHEM 3441,3520;co-req CHEM4380)
- _____ CHEM 4320 Biochemistry I (CHEM 3411 and BIOL 1440)
- _____ One of the Following:
 - ___ CHEM 3360 Intermediate Inorganic Chemistry (Fall only) (CHEM 1451)
 - ___ CHEM 4335 Biochemistry II (Spring only) (CHEM 4320)
 - ___ CHEM 4351 Environmental Chemistry (odd year Spring only) (CHEM 3411 and CHEM 3520)
 - ___ CHEM 4385 Topics in Advanced Chemistry (CHEM 4460)
- _____ CHEM 4112 Seminar: Capstone (Spring only) (pre or co-req CHEM 4450 or 4460) [UD UCA Core: Z]
- _____ CHEM 4V01 Research (minimum of 2 credit hours)

REQUIRED BIOLOGY (4 hrs)

- _____ BIOL 1440 Principles 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 (15 hrs)

- _____ MATH 1496 Calculus I (MATH 1390,1392, 1486, or 1580)
- _____ MATH 1497 Calculus II (MATH 1496)
- _____ MATH 2471 Calculus III (MATH 1497)
- _____ MATH 3331 Differential Eqns (MATH 1497) [UD Core: C]

NOTE: only one more math class is required to earn a minor in math. Most commonly these students also take MATH 3320 [UD Core: I]

* 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

Graduation Requirements for B.S. Degrees in Chemistry include completion (D or better)

- ◇ 120 total credit hours (D or better),
- ◇ 40 hours of upper division courses (3000-4000 level),
- ◇ Lower division core requirements,
- ◇ Upper division core requirements (I,C, D, R, Z—CHEM 4112)

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.

Revised: Fall 2020