

THE UNIVERSITY OF NORTH CAROLINA ASHEVILLE

FACULTY SENATE

Senate Document Number SD2124S

Date of Senate Approval 02/08/2024

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Statement of Faculty Senate Action:

**APC Document 14 (CHEM): Delete CHEM 380, replacing it with CHEM 395**

**Effective Date: Fall 2024**

1. **Delete:** On pages 115-116, the entry for **CHEM 380, Chemical Research Methods:**

**380 Chemical Research Methods (1)**

An introduction to research projects directed by the chemistry faculty and to fundamental concepts of research in chemistry. Use of both classical chemical literature and computerized information sources will be discussed. Students will be introduced to the presentation of research results using both poster format and oral communication methods. Pre- or corequisite: CHEM 223. Fall.

**Add:** On page 116, new course, **CHEM 395, Chemical Research Methods and Ethics (3)**

**395 Chemical Research Methods and Ethics (3)**

An introduction to research projects directed by the chemistry faculty and to fundamental concepts of research in chemistry and professional chemistry skills and competencies. These will include identifying a capstone research project, methods of searching the chemical literature and evaluation of literature sources related to their project, professional conduct of chemists including ethics in research, and career professional development. Students will be introduced to the presentation of research results using both written and oral communication methods. Pre- or corequisite: CHEM 223. Fall.

2. **Delete:** On page 116, the prerequisite for CHEM 416:

CHEM 416 prerequisite: CHEM 380

**Add:** On page 116, in place of deleted entry:

CHEM 416 prerequisite: CHEM 395

**Impact Statement:** The anticipated class size is 15 BS chemistry majors; meeting for two 75-minute class periods per week, at 3 faculty contact hours. The instructional format is a hybrid between lecture and seminar format. The current scheduled in-class time for CHEM 380 is already for two, 75-minute class periods per week so student scheduling will remain the same.

Total student workload expectations will increase class time (3 hours for a 1 credit hour class) to 9 hours per week (3 in class and 6 outside of class).

This change will increase the number of required hours in the BS chemistry major by 2 credit hours but will not increase faculty contact hours. The change will result in a possible reduction of the number of potential elective credit hours students take.

#### BS Chemistry Major Curriculum Change

Old: Students took CHEM 380 for 1 credit hour

New: Students will take CHEM 395 for 3 credit hours. Students under pre-2024 catalog requirements who have not taken CHEM 380 will take the new course to complete the requirement. CHEM 395 will replace CHEM 380 as the prerequisite for CHEM 416.

**Rationale:** CHEM 380 is part of the American Chemical Society approved BS chemistry degree track and our ACS approval requirements have expanded expectations for professional conduct of scientists and scientific writing, which will be incorporated into CHEM 395 to meet the new standards (Link to 2023 ACS Guidelines: <https://www.acs.org/content/dam/acsorg/education/standards-guidelines/approval-program/guidelines-draft-sept2022.pdf>).