

THE UNIVERSITY OF NORTH CAROLINA ASHEVILLE
FACULTY SENATE

Senate Document Number SD1422S
Date of Senate Approval 2/03/2022

Statement of Faculty Senate Action:

APC Document 10 (CHEM): Reinstate CHEM 236 General Chemistry II to resolve transfer articulation issues with chemistry curriculum

Effective Date: Fall 2022

1. **Add:** On page 100, **CHEM 236, General Chemistry II:**

236 General Chemistry II (3)

A general chemistry course with topical coverage including, but not necessarily restricted to chemical equilibria, electrochemistry, acid-base theory, oxidation-reduction concepts, aspects of chemical thermodynamics, and chemical kinetics and reaction mechanisms. Emphasis is placed upon quantitative problem solving. Prerequisites: CHEM 111, 132. See department chair.

Impact: There will be no impact on resource or faculty needs or expected enrollment, except for a small increase in CHEM 233 enrollment for transfer students seeking to complete a chemistry major.

CHEM 236, General Chemistry II, was removed from the catalog and the Chemistry curriculum in Fall 2016, and CHEM 233 was added instead. The equivalency for the second semester of Chemistry courses from other colleges was changed to CHEM 233 at that time, and this proposal will result in those equivalencies once again being CHEM 236 instead of CHEM 233.

Students in majors currently requiring CHEM 233 will have the option to use CHEM 233 or 236 to satisfy the requirement. To keep CHEM 236 as an active course in the catalog, it will be offered at least once every few years in the Summer term. All of the Chemistry faculty can teach CHEM 236 (four have done so in the past), so there is no expected need for additional resources to teach the course every few years. This change will necessitate an update to the UNC Common Numbering System.

Rationale: While there is an overlap of problem solving strategies and depth of chemistry content in the two courses, CHEM 233 is different from CHEM 236 in the specific chemistry concepts which are focused on the chemistry of inorganic compounds. However, with UNC Asheville's mandated transfer articulation agreement, the General Chemistry II course offered by North Carolina 2-year colleges (i.e., CHM 152) must transfer to UNC Asheville as a course in our curriculum. CHM 152 has been transferring to UNC Asheville as CHEM 233 + CHEM 145 since 2016, even with the difference in course content. This (1) has resulted in a clear content gap for chemistry major transfer students that has impacted their preparation for upper-level chemistry courses and (2) is out of compliance with our accreditation with the American Chemical Society (ACS) which requires a foundational inorganic chemistry course for all B.S. chemistry graduates. Chemistry majors who transfer CHM 152 are not meeting the requirements for an ACS certified chemistry degree.

This catalog change seeks to resolve this issue for chemistry transfer students, as CHM 152 will now once again transfer as CHEM 236 + CHEM 145. Transfer chemistry majors would be able to take CHEM 233 without duplicating a course for which they already have credit and UNC Asheville would still be in compliance with the transfer articulation agreement. Students in other majors requiring a second semester Chemistry course will be able to use either CHEM 233 or 236 to fulfill the requirement. These other departments have concurred with the change.