



January 13, 2021

To: College of Arts & Sciences Curriculum Committee
From: Dr. Jim Phillips, Chair, Department of Chemistry and Biochemistry
Re: Program Changes (100-007)

Colleagues;

On December 9, 2020, the faculty in the Department of Chemistry and Biochemistry unanimously approved the changes noted below to the Chemistry, ACS, General Emphasis Comprehensive major (100-007). Thus, we request implementation of the following program changes with the next possible Catalog.

Program: Chemistry, A.C.S., General Emphasis, Comprehensive Major (100-007)

Approval Date: 12/9/2020

Current Catalog web page: <https://catalog.uwec.edu/undergraduate/arts-sciences/chemistry-biochemistry/chemistry-ac-s-comprehensive-major-general-ba-bs/>

Specific Changes:

- Replace CHEM 444 (3 credits) with CHEM 344 (2 credits) in the list of required courses (i.e., following “Requirements: In addition to the chemistry core and”).

Why? CHEM 444 underwent a major revision in fall 2020, including changes to content, the course number (444 to 344), and credit hours (3 to 2). The approval of this revision by the Arts and Sciences Curriculum Committee is in progress, and when it goes into effect, the program requirements and associated catalog copy will need to reflect it.

- Replace the current section under “Electives” with the following:
 - Take 2 courses from the following: CHEM 304, CHEM 318, CHEM 361, CHEM 401, CHEM 411, CHEM 426, CHEM 460, CHEM 491, or CHEM 497
 - At least one of the courses must be CHEM 318, CHEM 401, CHEM 426, or CHEM 491

Why? The general motivation behind this change is the intent of the faculty to increase the rigor of the program by requiring additional elective courses, including one from a select list that includes more in-depth (primarily 400-level) courses. In addition, an increasing number of recent graduates have found it possible to fulfill their elective requirements by taking a significant number of directed and/or independent study credits, typically associated with faculty/student research collaborations. This has had the impact excluding critical experiences provided in advanced inorganic, organic, and cross-divisional courses. These changes will (1) largely eliminate the possibility of independent/directed

studies credits being used to satisfy elective requirements (except for CHEM 497, which is a research experience with a rigorous writing component) and (2) ensure that every student takes one advanced course in inorganic chemistry (CHEM 401) or organic chemistry (CHEM 426), or an advanced cross-divisional course (CHEM 318 or CHEM 491).

- Change the minimum number of credits from 61 to 64.

The changes noted above translate to an increase in total credits from 61 to 64, mainly due to the addition of the additional advanced elective. The 1-credit reduction in CHEM 444 (to be 344), was balanced by an increase of 1 credit for CHEM 420 (previously approved), for which the lab hours needed to increase to meet program certification requirements. This stemmed from the reduction of instructional time in a standard term from 15 to 14 weeks, which reduced the total number of program lab hours to below the minimum. Though not rigorously bound by a certification requirement (as in the case of the lab hours), the increase in credits from 61 to 64 re-instates a nearly equal amount of instructional time that was lost during the shift from a 15-week to a 14-week semester.

Thank you kindly for your time and consideration.