

THE UNIVERSITY OF NORTH CAROLINA ASHEVILLE
FACULTY SENATE

Senate Document Number 0820S
Date of Senate Approval 02/06/20

Statement of Faculty Senate Action:

APC Document 7 (CHEM): **Rename the Department of Chemistry to the
Department of Chemistry and Biochemistry;
Edit the departmental narrative**

Effective Date: Fall 2020

1. Delete: On page 94, the program description for Chemistry:

CHEMISTRY (CHEM)

Professor Wasileski (Chair); Professors Heard, Holmes, Holt, Krumpe; Associate Professors J.W. Brock, A. Wolfe; Assistant Professors Steed, McMahon; Senior Lecturer Schmeltzer; Lecturers Brogdon, Love

As a central science, chemistry is an important component of many disciplines. Therefore, it is the goal of the department to actively contribute to raising the level of scientific literacy for all students, provide them with an understanding of the relationship of chemistry to society, and to nurture their appreciation of the character of chemistry as a humanistic activity. The department continues to implement an approach that is built around an experiential, explorative-based curriculum that integrates the lecture with the laboratory and introduces students to research pedagogy early in their education. This involves smaller classes, group work, interactive methods, longer-term laboratories (projects and/or discovery-based laboratories), much greater use of student-centered learning activities, and culminates with a collaborative student-faculty research project. The department provides students with a solid base of chemical knowledge including the structure and reactivity of matter, familiarity with mathematical models describing matter, and experience with characterizing and measuring properties of matter. Students are taught problem solving and self-directed learning skills and communicating effectively both in writing and speaking.

Because its constituency is so diverse, the department offers both the Bachelor of Science and the Bachelor of Arts degrees with the flexibility to tailor course options to meet specific needs of the students.

Add: On page 94, in place of deleted entry:

CHEMISTRY AND BIOCHEMISTRY (CHEM)

Professor Wasileski (Chair); Professors Heard, Holmes, Holt, Krumpe; Associate Professors J.W. Brock, A. Wolfe; Assistant Professors Steed, McMahon; Senior Lecturer Schmeltzer; Lecturers Brogdon, Love

As a central science, chemistry is an important component of many related disciplines and includes five major chemistry sub-disciplines in analytical chemistry, biochemistry, inorganic chemistry, organic chemistry and physical chemistry. Therefore, it is the goal of the

department to actively contribute to raising the level of scientific literacy for all students, provide them with an understanding of the relationship of chemistry to society, and to nurture their appreciation of the character of chemistry as a humanistic activity. The department continues to implement an approach that is built around an experiential, explorative-based curriculum that integrates the lecture with the laboratory and introduces students to research pedagogy early in their education. This involves smaller classes, group work, interactive methods, longer-term laboratories (projects and/or discovery-based laboratories), much greater use of student-centered learning activities, and culminates with a collaborative student-faculty research project. The department provides students with a solid foundation of chemical knowledge in all five sub-disciplines and builds upon that foundation with students customizing their degree focus generally across the sub-disciplines or in a specific sub-discipline such as biochemistry through upper-level coursework and student-faculty research. Throughout the curriculum, students learn problem-solving and self-directed learning skills and how to communicate effectively both in writing and speaking.

Because its constituency is so diverse, the department offers both the Bachelor of Science and the Bachelor of Arts degrees with the flexibility to tailor course options to meet specific needs of the students.

Impact Statement: There will be no impact on students or resource needs, or on other departments and programs resulting from the renaming of the department.

Rationale: The requested name change and update of the catalog description will enable the Department to more clearly and accurately reflect the current breadth of its curriculum, faculty expertise, and student-engagement to multiple stakeholders [that include current students, Office of Admission and their work with perspective students and parents, funding agencies, accrediting bodies (American Chemical Society), and potential donors].

Although Biochemistry is one of five sub-disciplines of chemistry, it is *the emerging* sub-discipline of chemistry in terms of student interest and future career opportunities for students. Biochemistry is often identified separately as a chemistry sub-discipline because of its focus on the chemical processes in living things which is distinct among the other four chemistry sub-disciplines. At UNC Asheville, more than 2/3 of chemistry graduates focus their chemistry degree in the biochemistry sub-discipline and more than half of the Department's tenure-track faculty engage students in undergraduate research in biochemistry or a biochemistry-related project. This is possible through the number of biochemistry-related courses that chemistry majors can take in the chemistry major: CHEM 323: Foundations of Biochemistry, CHEM 430: Toxicology, CHEM 430: Metabolism, CHEM 436: Biophysical Chemistry, CHEM 446: Medicinal Chemistry. Changing the Department's name from Department of Chemistry to Department of Chemistry and Biochemistry better reflects the current department and better communicates the breadth of faculty-student engagement. It will also enable prospective students to better understand the curricular offerings available at UNC Asheville in order to attract interested students.

The name change is consistent with state and national trends. UNC Greensboro and UNC Wilmington in the UNC system have already changed their department name to Department of Chemistry and Biochemistry, in addition to the following universities: Butler University, Colorado College, Denison University, DePaul University, DePauw University, Florida Atlantic University, Henderson State University, Indiana University, Lipscomb University, Miami University of Ohio, North Central College, Oberlin, Ohio State, Rider University, Siena College, SUNY Fredonia, Texas State, UCLA, University of Colorado Boulder, University of Denver, University of Maryland, University of North Dakota, University of North Georgia, University of Northern Colorado, University of Oklahoma, University of Oregon, University of San Diego, University of South Carolina. This list is not exhaustive.

