Michael Hayes (2009). Professor of Chemistry and Department Chair. B.S., Union University; Ph.D., University of Texas at Austin.

Tamara (Betsy) Caceres (2019). Assistant Professor of Chemistry. B.Pharm., Universidad Central del Este, Dominican Republic; Ph.D., Utah State University

Jimmy H. Davis (1978). O. P. Hammons Chair and Professor of Chemistry. B.S., Union University; Ph.D., University of Illinois; Additional study, University of Florida, Oak Ridge Associated Universities, Argonne National Laboratory, Harvard University, and Oxford University (England).

Sally A. Henrie (1998). University Professor of Chemistry. B.S., University of Arizona; Ph.D., South Dakota State University.

Randy F. Johnston (1994). University Professor of Chemistry. B.S., University of Missouri, St. Louis; Ph.D., Texas Tech University.

Michael R. Salazar (2001). Professor of Chemistry. B.S., New Mexico State University; Ph.D., University of Utah; Additional study, Los Alamos National Laboratory.

Laura Hailey (2020). Academic Secretary–Biology and Chemistry, and Biology Program Coordinator. B.S., Union University.

Giley Wright (2004). Stockroom Coordinator. B.S., Union University.

The chemistry program at Union University seeks to serve effectively all students, recognizing different needs, interests, and career goals. The faculty seeks to help students understand the physical world, the methods by which it may be studied, and its relationship to other aspects of the human experience. It is the intention of the faculty to create an environment in which students are challenged to acquire skills in problem solving utilizing the modern methods of science and to study in-depth the chemical processes which characterize life systems while developing an inquiring attitude toward scientific exploration. The curriculum is intended to provide liberal arts students with a working knowledge of science and to meet the needs of students who wish to:

- continue study in chemistry at the graduate level;
- teach science at the elementary or secondary school level;
- prepare to enter a health science profession such as medicine, dentistry, medical technology, pharmacy, nursing, physical therapy, or other allied health fields; or
- become a professional/industrial chemist.

Students who complete the chemistry or biochemistry degree as described below or upon their coursework being approved by the chair of the department, will receive degrees that are certified by the American Chemical Society. Our certified programs offer students a broad-based and rigorous chemistry education that provides them the intellectual, experimental, and communn9PC. One of: 405, 430, 435

II. Major in Biochemistry–70 hours
- A. CHE 111, 112, 211, and 221–13 hours
- B. CHE 314, 315, 324, 326–10 hours
- C. CHE 317, 318, 319, 329, 327, 335–19 hours
- D. CHE 424/425–3 hours
- E. CHE 498–1 hour
- F. BIO 112, 211, 315, 325–16 hours
- G. BIO–one 200-level Elective–4 hours
- H. BIO–one 300-level Elective–4 hours
- I. No minor is required.

III. Major in Medical Laboratory Science–102–105 hours
- A. Chemistry 111, 112, 211-21, 314-15, 319, 324, 326
- B. Biology 112, 211, 221, 222, 315, 316, 320
- C. Physics 213-214 or 231-232
- D. Computer Science (3 hours) and MAT 111 or preferably MAT 211
- E. A minimum of 33 hours of Medical Technology at an affiliated hospital as the fourth year of study.

IV. Major in Chemical Physics–119 hours

Designed for those seeking a broad background in the physical sciences to pursue graduate work in chemistry or physics or secondary teacher licensure, the major permits students with previous experiences to shorten the time spent in formal education without reducing the quality of the degree obtained.

Students with an advanced preparation in secondary school or as college sophomores may be selected for this program. Entrance as a freshman requires an ACT Composite of 26 or higher with a Math ACT of 25 or higher, 4 units of high school math with a B average or better, high school chemistry and physics with a B average or better, and a successful personal interview with a faculty admissions committee. Entrance as a sophomore requires readiness to enter MAT 211, CHE 111 and PHY 231 with a cumulative and science GPA of 2.5 or higher, and a successful interview with admissions committee.

- A. CHE 111, 112, 211, 221, 314, 315, 324, 326, 317, 318, 327, 319, 335–38 hours

B. PHY 231, 232, 311, 313, 314; 325 or 420; 430–26 hours
C. PHY or CHE 424; PHY or CHE 498; Upper-level PHY or CHE–4 hours
D. MAT 211, 212, 213, 314–15 hours
E. ENG 111, 112; 201 or 202–9 hours
F. ART 210; CHR 111, 112; BIO 112; HIS 101; and 9 hours of social science–27 hours
G. No minor is required.

V. Teacher Licensure with Endorsement in Chemistry 6–12
A. Complete the requirements for the Chemistry major as shown above including CHE 405.
B. Additional Requirements: CSC 105, PHY 112 (in B.S. core), PHY 231 and 232, MAT 212 (in B.S. Core), and membership in SMACS.
C. Professional Education:
1 Prior to Internship–EDU 150, EDU 305, EDU 358, PSY 213, PSY/SE 230.
2. Fall of Internship Year–EDU 306, 340, 418, 440
3. Spring of Internship Year–EDU 441 and 451
4. CSC 105 is required in the BA core
D. Completion of applicable portions of the Praxis II.
E. For additional information, see the Director of Educator Preparation.

VI. Minor in Chemistry
A. CHE 111, 112, 211, 221, 314, 315, 324 326–23 hours
B. Elective, one of: 317, 319, 335, 405, 430–3 or 4 hours

In addition to the requirements listed in I., students must complete
A. Honors contracts in two of the following courses: CHE 211, 315, 318, 319, or 335
B. An honors contract in one of the following courses: CHE 405, 430, or 435
C. An honors contract in CHE 424/425 and 498

In addition to the requirements listed in II., students must complete
A. Honors contracts in two of the following courses: CHE 211, 315, 318, 319, or 335.
B. An honors contract in CHE 329.
C. An honors contract in CHE 424/425 and 498.

Admission Requirements for Majors with Discipline-Specific Honors