

AMBER D. MCWILLIAMS

PROFESSIONAL TEACHING EXPERIENCE

8/2019- Present Coastal Carolina University

Senior Chemistry Lecturer - General Chemistry Coordinator

- Lecture both courses in general chemistry freshman sequence, including both general chemistry laboratory courses to both majors and non-majors. General chemistry coordinator; maintaining Gen. Chem lab manual, common course materials. Also supervise student workers (10-18 each semester) as learning assistants and tutors. Maintain both departmental, college and university service.

8/2012-8/2019 Coastal Carolina University

Chemistry Lecturer - General Chemistry Coordinator

- Lectured both courses in general chemistry freshman sequence, including both general chemistry laboratory courses. General chemistry coordinator; maintaining Gen. Chem lab manual, common course materials. Also supervise student workers (10-18 each semester) as learning assistants and tutors.

8/2009-5/2011 Truman State University

Temporary Chemistry Lecturer

- Lectured double section of the 2nd course in a two-course general chemistry freshman sequence, including two laboratory sections. Ten contact hours not including office hours.

5/2010-7/2011 Upward Bound, Truman State University

Chemistry Faculty Member

- Taught a six-week college prep course to high school students. Course included laboratory and classroom work. Also designed a general chemistry curriculum based upon national standards for future use by future Upward Bound staff.

8/2003-5/2005 Iowa State University

Program Assistant I

- Provide teaching assistance to faculty lecturer in undergraduate chemistry course 177/178. Conduct recitation sections to further review and explain course materials. Conduct lab sections for course with direct supervision of chemical experiments. Grade quizzes, lab work and tests. Assist instructor in determining overall grade for students in their sections. Maintain defined office hours. Also responsible for managing WebCT web-based grade book for all freshman chemistry courses.

8/2002-5/2003 Iowa State University

Teaching Assistant

- Provide teaching assistance to faculty lecturer in undergraduate chemistry courses 155, 167 and 105. Conduct recitation and laboratory sections with direct supervision of chemical experiments. Grade quizzes, lab work and tests. Assist instructor in determining overall grade for students in their sections. Maintain defined office hours. Instructed students on proper procedures for FTIR instrument.

EDUCATION

2002 - 2004 Iowa State University Ames, IA

M.S. Inorganic Chemistry

- Under the supervision of Dr. L. Keith Woo. Research in the inorganic chemistry field. Thesis investigated the use of cyanobacteria as a biosorbent for the removal of mercury (II) from aqueous solution. Also performed synthetic work for new tellurium complexes and various porphyrins. Characterization and analysis using NMR, FTIR, UV-VIS and AAS.
- Safety representative and waste manager for one year.
- Teaching Assistant in various undergraduate courses, conducting recitation and laboratory sections with direct supervision of chemical experiments including instrument instruction for NMR, FTIR, Spec-20 and UV-VIS.

1997 - 2002 SD School of Mines & Technology Rapid City, SD

B.S. Chemistry

- Under the supervision of Dr. M. S. McDowell. Research in the inorganic chemistry field. Synthesis of various cobaloxime compounds. Responsible for performing experiments, collecting and analyzing data, and reporting data to advisor and peers. Characterization of compounds using NMR, FTIR, and UV-VIS.

Work Study, Chemical Storeroom

- Four semesters, South Dakota School of Mines and Technology. In charge of preparing chemicals and supplies for freshman chemistry, physical chemistry and chemical engineering laboratories. Responsible for organizing and cleaning storeroom, tending to departmental chemical needs and answering questions pertaining to chemical storage, use and disposal.

WORK EXPERIENCE

3/2008-6/2008 Advanced Analytical Technologies Inc.

Temporary Laboratory Assistant

- Various gel, solution and standard preparation for consumables laboratory. Also assisted in updating of chemical inventory and standard operating procedures.

2/2005-3/2007 MTEC BioAnalytics

Analytical Chemist/Laboratory Supervisor

- Responsible for Gas Chromatography Laboratory including all Agilent 6890 GC instrument maintenance and troubleshooting, sample preparation and analysis of fatty acids in soybeans from a variety of customers, data collection and accuracy, requisition and maintenance of supplies and equipment, supervision of laboratory assistants, waste management, and web site design.

8/2001-5/2002 South Dakota School of Mines and Technology

Temporary Chemical Storeroom Assistant

- Responsible for organizing chemical and glassware stock. Also responsible for tending to departmental chemical needs, and answering questions pertaining to chemical storage and disposal. Responsible for preparing chemicals and equipment for all freshman laboratories.

GRANTS, AWARDS, ACKNOWLEDGMENTS

2021	Provost's Award for Innovative Teaching, \$500 award
2020	Chemistry Club Award: "Favorite Professor"
2020	Chemistry Club Award: "Most Inspiring Professor"
2018-2019	Coastal's Office of Online Learning (COOL) Grant, \$2300
2017-2018	Coastal's Office of Online Learning (COOL) Grant, \$2400
2018	Donner for Kente Ceremony (pivotal role in student success)
2018	Chemistry Club Award: "Most Involved Professor"
2017	Chemistry Club Award: "Most Involved Professor"
2016	Chemistry Club Award: "Most Inspiring Professor"
2016	Chemistry Club Award: "Most Involved Professor"
2015	Chemistry Club Award: "Favorite Professor"

SERVICE

2022-present	Gupta College of Science NTT Committee Chair – Lead charge to establish a non-tenure track committee within the college, elected inaugural chair.
2021-present	University NTT Committee Chair
2021-2023	Department of Chemistry Search Committee Member – Served on 4 unique search committees for the department
2020-present	Faculty Senator, Department of Chemistry
2019-present	University NTT Committee Member – Represent non-tenure track faculty members
2018	Ad-Hoc University Committee Member – Charged with determining need for a new university standing committee to represent non-tenure track faculty members
2018-present	Department of Chemistry Assessment Committee Member – Assessment planning, collecting and summarizing outcomes.
2017	University Strategic Planning Sub-Committee Co-Chair – Charged with identifying and developing ways to evaluate "effective teaching".
2012-2014	Department of Chemistry Curriculum Committee Member – Development and updating primarily general chemistry curriculum
2012-2014	Department of Chemistry Assessment Committee Member – Assessment planning, collecting and summarizing outcomes..

2013 Department of Chemistry Search Committee Member – Search for Tenure
Track Faculty Member, Physical Chemistry

PROFESSIONAL MEMBERSHIPS

5/2002-present Alpha Chi Sigma: Professional member.

3/2001-5/2002 Alpha Chi Sigma: Active member.

9/2000-present American Chemical Society

REFERENCES UPON REQUEST
