

NICOLE L. JUHL

2010 Timberline Drive, Colorado Springs, CO 80920 | 719-235-3382 | niki.juhl@gmail.com

EDUCATION

University of Colorado Colorado Springs

Masters of Arts: Curriculum and Instruction

2007

Action Project: "Using Alternative Assessments in 7th Grade Science"

Cumulative GPA: 4.0

Colorado State University – Fort Collins

Bachelor of Science

2004

Area of Concentration: Microbiology

Cumulative GPA: 3.742

AWARDS

OER Champions for UCCS Campus

2024

CAST Teaching Award for Excellence in College Science Education

2023

UCCS Campus Outstanding Instructor Award

2022

Open Educational Research Grant Phase 3/3

2021 – Current

Develop, write, license, and institute new OER lab manual for CHEM 1201/1211

Faculty Fellowship Program – Faculty Resource Center

2018

Redevelopment of CHEM 1201 to a flipped classroom

Strengthening Institutions Program Grant – Department of Education

2019 - 2021

Chemistry Redesign and Implementation of Peer-Leader Program

Colorado Science Teach Award Nomination Runner Up

2015

TEACHING EXPERIENCE

University of Colorado Colorado Springs

Instructor – CHEM 1201 (Lecture and lab), CHEM 1211 (Lecture and Lab),

CHEM 1111 OL1, CHEM 1112 OL1, CHEM 1402, GPS Healing Nature, GPS Lessons

In Chemistry

2016 - Current

Incorporated best teaching practices to educate first-year students in large lectures.

Redesigned Introduction to Chemistry by incorporating flipped lectures, online assessments, and increasing class practice time to target at-risk 1st year students.

Developed and piloted the use of undergraduate 'Peer Leaders' during lecture to increase the instructor-student ratio.

Incorporate green and sustainable chemistry to address economic, social, and environmental justice.

Rampart High School

Science Teacher – IB HL Chemistry & Biology (12), AP/General Environmental Science

(11/12), MYP Chemistry (10), Honors/General Chemistry (11),

MYP/H/Principles of Biology (9), MYP Physics (10), Astronomy (11/12)

2007-20016

Created and implemented standards-based lessons and labs.

Created original podcasts to flip lessons and provide digital access to content (lectures/practice).

Differentiated lessons to meet students' needs, interests and learning styles.

Developed IB Chemistry and Biology two-year curriculum to include:

Technique training through guided labs.

Mentored students in researching and implementing unique research opportunities through in-class independent labs and extended research papers.

Developed inquiry-based labs for students at all skill levels which are assessed with standardized rubrics.

Developed research and labs for real-world application.

Effects of acid rain, effects of mining and heavy metal contamination, vitamin C degradation over time, investigating material development for batteries.

Incorporated technology – specifically Vernier probe ware, spectrophotometer, and data manipulation.

Actively used assessment data to track student progress for curriculum and lab skill development.

Rampart High School

Science Department Co-Chair

08/2011 – 05/2014

Participated in Department Chair meetings

Participated in Rampart Leadership Team

Designed current course sequence with implementation of multiple new courses – including justification of course at District Board Meetings

Design science writing goals in conjunction with Rampart Writing Team

Liaison between Admin and Science Department

Create science schedule and room placements for the department each year.

Track and update chemical inventory and disposal.

University of Colorado Colorado Springs

Partnership with Bachelor of Innovation™ Degree, UCCS

02 – 12/2014

Assisted in teaching/acted as client in the first summer 'Teams' class with Dr. Stiles.

Created a partnership with the BI program.

Emphasis on bringing innovation to science programs at the high school level.

Developed Innovative Design in Educational Alliances for STEM (I.D.E.A.S™) to meet an educational need in high school science classes for real-world problem-based learning through innovative skill sets.

DEPARTMENT SERVICE

University of Colorado Colorado Springs

Intro to Chemistry Lab Curriculum Coordinator

08/2018 – Current

Wrote an OER lab manual for CHEM 1201/1211 to seamlessly integrate healthcare, green chemistry, and the UN Sustainable Development Goals.

Design remote asynchronous labs, due to COVID, and did not work through a third party.

Integrate more technology platforms to meet student needs and access to content.

Integrate green chemistry themes into all areas in lab.

Design lab lectures, pre-labs, lab analysis, lab applications, lab quizzes, lab mid-semester surveys, lab presentations

Observe and support GTA's and Instructors.

Coordinate with Lab Coordinators within the department.

Manage lab safety guidelines, lab canvas modules, lab content.

Diversity, Equity, Inclusiveness, and Respect Department Committee Member

01/2020 – Current

Original member tasked with writing our department DEI statement.

Develop action steps for teaching, service, and research

GTA Training and Support Team Lead

2021 – Current

Co-designer and lead for training, supporting, guiding, current GTAs

Develop GTA Training manual

Provide guidance on how to develop a teaching philosophy

CAMPUS SERVICE

Compass Curriculum Sustainability Chair

12/2018 – Current

Participate in Compass Leadership Team, Compass Curriculum Review Team

Manage Sustainability Committee for reviewing course proposals – both new and renewal courses
Support Compass Curriculum Campus activities and events
Present at Conferences for Compass and General Education Pathways

Campus Sustainability Committee**09/2017 – 2020**

Faculty representative for the committee

Beyond Benign**2019 – Current**

CO Green Chemistry Community Building
Co-contact for Green Chemistry Commitment
Present at Conferences/Webinars discussing integration of green chemistry

COMMUNITY/PREVIOUS SERVICE

Kappa Alpha Theta Advisory Board Committee Member**2016 – 2019**

Finance and Facilities Advisor for the Beta Omega chapter of Kappa Alpha Theta at Colorado College

District 20 Committees

BYOD Grant Team (2015-2016)
Creating Innovators Grant Team (2013-2014)
District Science Liaison Team (2009-2012)
District Science Curriculum Committee (2007-2009)
Revised district standard outcomes from the current revised state standards
Created common rubrics for content and labs for the district

Rampart High School Committees

Professional Learning Communities
Professional development days

RELATED EXPERIENCE

McGraw-Hill Higher Education

2023 – Current**Digital Faculty Consultant**

Present ALEKS Blend to other institutions and instructors
Produced short tutorial videos for GOB Smith 6e

Colorado State University

Tutor: Organic Chemistry**2003**

Academic Advancement Center

Colorado State University

Organic Chemistry Stockroom Employee**2004**

PROGRAM DEVELOPMENT

Green Chemistry Integration into Intro to Chemistry and General Chemistry Courses
Flipped and Blended science classroom for multiple science subjects
BYOD development for multiple levels of science courses
Developed Environmental Science Program (general/AP)

CONFERENCES/PRESENTATIONS

American Chemical Society Spring 2025 Conference**03/2025**

“Empowering Students as Changemakers: Using Labs, Projects, Open Educational Resources, and the UN Sustainable Development Goals in Foundational Chemistry Courses to Deliver Equity-Focused Green and Sustainable Lab Curriculum”

Science on Tap <i>"Green Chemistry at UCCS"</i>	09/2024
American Chemical Society Fall 2024 Conference <i>"Increasing Student Equity and Engagement through Green Chemistry Projects"</i> <i>"Integrating GSC and SDG in OER Lab Manual for GOB"</i>	08/2024
McGraw-Hill Webinar Concept Application with ALEKS	04/2024
The ALEKS Chemistry Summit: A Virtual Symposium	11/2024 04/2024 03/2024 11/2023
National Science Teaching Association National Conference <i>"Unleashing the Power of Chemistry and Technology in High School Science"</i> <i>"Empowering Tomorrow's Scientists: Scientific Communication using MS Sway and Canva Infographics"</i>	03/2024
McGraw-Hill National Sales Meeting <i>"Chemistry: Product Deep Dive" – Using ALEKS</i>	08/2023
Peak Area Leadership in Science <i>"Green Chemistry in Action"</i>	04/2023
COACS November Meeting <i>"Transforming First Year Labs"</i>	2022
Green Chemistry Connections - Webinar <i>"Transforming First Year Chemistry Labs with Green and Sustainable Chemistry"</i>	2022
Colorado OER Conference <i>"OER Success Stories – Tips, Tricks, and Takeaways for Creating an OER"</i>	2022
UCCS Teaching and Learning Conference <i>"Curating and Creating Open Educational Resources (OER): An Interactive Showcase of Faculty Generated OER"</i>	2022
Virtual Lab Summit – Hosted by Macmillan Learning/Hayden-McNeil <i>"Transforming First-Year Chemistry Labs through Green and Sustainable Chemistry" – Featured Speakers</i>	2021
Association of American Colleges & Universities –General Education, Pedagogy, and Assessment Conference <i>"Freeing their HIPs: Integrating High-Impact Practices with General Education while Respecting Faculty Autonomy and Departmental Priorities"</i>	2020
Innovative Education Colorado (InnEdCO) Conference <i>"How NOT to Innovate (a humorous look at failing)" -INGITE Talk</i> <i>"Innovation in the Classroom" Workshop</i>	2015
CO ASCD Monthly Meeting <i>"IGNITE Partnerships"</i>	2015

MEMBERSHIPS

American Chemical Society (ACS)
 American Association of Chemistry Teachers (AACT)
 Royal Chemistry Society (RCS)
 Kappa Alpha Theta