

Colleen Fordyce, Ph.D.
Biology, AP Biology, Chemistry, Physics Teacher
La Cueva High School, Albuquerque

Colleen Fordyce earned a PhD in Biomedical Sciences from UNM. She pursued postdoctoral studies at the University of California, San Francisco where she applied insights from her doctoral studies to describe cellular responses to telomere shortening which were associated with increased risk for breast cancer. While pursuing a career as a research scientist Dr. Fordyce also sought out opportunities to teach. Ultimately, Dr. Fordyce decided to hang up her pipettes and pursue teaching full-time. She has taught at La Cueva High School in Albuquerque since 2017 and currently teaches biology and AP biology. Dr. Fordyce is motivated by several factors, including a desire to prepare her students to be empowered science consumers and to inspire them to pursue STEM fields in college. She is humbled and inspired by her amazing students who laugh as hard as they work.

She brings her experience as a research scientist to her classroom and has developed unique labs that expanded the hands-on experience for students while linking to real world problems. For example, her AP biology students recently used chemistry and the properties of water to examine data collected on the surface of Mars and her freshman biology class recently completed a case study of the polio vaccine. She uses her ties to researchers to bring guest speakers to her students and during 2019, when APS schools closed, she created a virtual scientific conference with a series of weekly virtual seminars for her students presented by researchers from across the country.

During the summer of 2020, Dr. Fordyce co-authored an entire NGSS-aligned Biology unit which could be delivered virtually for APS schools. The unit allowed students to explore the relationship between global warming, the decline of Pinon-Juniper woodlands in New Mexico, and their impact on the ecosystem. Students were encouraged to develop potential solutions to combat the decline in Pinon-Juniper woodlands.

She is the La Cueva HS Science Bowl Mentor and a member of several teams of teachers at La Cueva HS who support struggling students and identify areas and strategies for school-wide improvement.

In 2019 she co-facilitated a district-wide instructional workshop on NGSS standards for biology teachers. She has prepared unit and lesson plans for AP Biology using NM-PED, NGSS, and Common Core Standards.

One of her nominators said:

“As impressive as her accomplishments are, they fail to capture the joy and enthusiasm that Dr. Fordyce brings to her students. Her expectations of her students are high and yet, her students rise to meet them – in part because she provides consistent encouragement and a curriculum that is carefully designed to meet students where they are, while also pushing them forward.”