San Diego Mesa College

HSI STEM Newsletter

February 21, 2020



STEM Professional Learning



Lab Redesign Mini-Grant

"Biology 210 B Lab Redesign"

Professor Daniela Bruckman

As a new full-time hire to the Biology Department, Professor Daniela Bruckman worked on re-designing the lab portion of Biology 210B, which is the second course in a series of major level general biology classes. During her first semester teaching Biology 210B she utilized a lab manual that was published by a previous instructor. She then decided to design and implement her own lab activities for the Spring 2019 semester.

Professor Daniela Bruckman wrote a total of thirteen new Biology 210B labs that were implemented over the course of the Spring 2019 semester. In addition to

writing these new labs, she also organized new materials, investigated potential field sites, coordinated with lab technicians, and researched relevant content. The major focus of this Biology 210B lab redesign was to incorporate the components of the scientific methods into lab activities. Some examples include: hypothesis testing, data analysis, experimental design and scientific communication. These topics had been lacking from the previous Biology 210B lab activities. Introducing students to the methods used to conduct science within the context of organismal biology allowed them to develop the skills necessary to successfully pursue a career in the life sciences.

Many Mesa College students who have taken biology courses in high school or other colleges have not been exposed to methods in building scientific techniques within academic and professional settings. This Biology 210B lab redesign project addresses this. Hypothesis-testing methods were incorporated within more traditional organismal lab activities to enhance the content traditionally covered in Biology 210B, with the hope of closing equity gaps.

Welcome to the STEM Center!



Faculty and Tutor Team Spotlight

Hamad Alshaif

STEM Center and Embedded tutor

Hamad Alshaif is a student and tutor at San Diego Mesa College. He specializes in Human Anatomy and works closely with Dr. Michael Brewer and The STEM Center.

"I really enjoy being an Embedded Tutor because I can help students right when they are receiving the information. This enables me to remove what I like to call "seeds of doubt," which means that students don't leave class thinking about something they may not understand. I enjoy being a student in pursuit of my dream to become a Physical Therapist. I want to become a Physical Therapist in order to help those less fortunate. I'd also like to teach in the future and hope to become an adjunct professor for human anatomy. Programs like The Innovation Research Lab and the STEM Center support my education, my professional development, and provides me with balance regarding who I am and who I will become."



STEM Center



Hours of Operation

STEM Center

Monday - Thursday: 7:30 am - 8 pm Friday: am - 5 pm

STEM Tutoring

Monday - Thursday: 9 am - 8 pm Friday: 10 am - 3 pm

STEM Counseling

Monday: 4 pm - 6 pm Tuesday: 11am - 2pm Thursday: 10am - 12pm

Contact Our Team!

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