

CSU PHYSICS COLLOQUIUM

“ Talking Critically about Student Success in STEM ”

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Colorado State University

Monday September 13th at 4:00pm

120 Engineering (Hammond Auditorium)

Abstract

In this talk I will share my current research that addresses student success in STEM from a critical perspective. A critical perspective on student success means locating student challenges in STEM not within the students' themselves but within the systems at play, and that these systems are failing students not because they are broken but because they are functioning perfectly well based on their design. I will share my research teams' current work focused on student experiences in college precalculus and calculus from a critical perspective, discussing both recent qualitative research and quantitative research studies. I care about these courses personally because I think the content is fun, but more importantly because of the role they play in STEM students' college experiences. Introductory Physics plays a similar role. This talk is intended for a broad audience to gain a new perspective on student success in STEM and learn a bit about research coming from this perspective.

Biography

Jess Ellis Hagman is an Associate Professor in the Department of Mathematics at CSU. She completed her PhD in Mathematics Education from the joint program between San Diego State University and the University of California, San Diego. Her area of research is undergraduate mathematics education. Her work is focused on dramatically increasing the number and diversity of people who succeed in undergraduate mathematics—especially introductory mathematics courses that often function as a roadblock for STEM intending students. Her current research includes studying characteristics of successful precalculus and calculus programs, focusing on investigating ways departments can create diverse, equitable, and inclusive introductory mathematics programs.