## Electronic Seminar on Mathematics Education

## **Active Calculus**

## Matt Boelkins, Grand Valley State University



Oct 2, 2018 12:00 - 1:00 ET Several recent EMES presentations have focused on active or inquiry-based learning (such as those by Angie Hodge, Darryl Yong, Robin Pemantle, David Pengelley). Indeed, it is well-established that active learning offers, on average, significant benefits to students. At the same time, implementing active pedagogy effectively is challenging on several levels, including achieving student buy-in, developing engaging investigations for students, and addressing what Stan Yoshinobu and Matthew Jones have called "the coverage issue."

In this seminar, I will share some samples from my free and open-source text, <u>Active Calculus</u>, and demonstrate some of the features of the <u>HTML</u> <u>version of the text</u>. In addition, our practice-focused discussion will center on how I structure my calculus courses around active learning: daily preparation assignments, in-class activities, computer laboratory investigations, and outside-of-class WeBWorK and writing assignments. Seminar participants will be invited to share their experiences and questions regarding methods of interactive engagement in calculus and more. Following the seminar, I'll be glad to share any of the discussed supporting materials upon request.

To join the seminar, go to https://zoom.us/j/8803591328

For more information on EMES: http://math.mit.edu/ seminars/emes/