

1106-B5-2523

Luke T Walsh* (lwalsh@cvcc.edu), 2550 Hwy 70 SE, Hickory, NC 280602, and **Katie J Mawhinney** (mawhinneykj@appstate.edu), Department of Mathematical Sciences, 121 Bodenheimer Dr., Boone, NC 28608. *The Tropic of Calculus: No Course Is an Island*. Preliminary report.

Have High Schools, Community Colleges, and Universities evolved into three unique, disjoint islands where students can learn calculus? Curriculum and Pedagogy Alignment were two elements identified in the *Fall 2012 Ramping Up for STEM Success* report as successful in supporting transfer student success in STEM undergraduate programs. As a “gateway to the sciences”, the first-year differential calculus courses are ubiquitous in secondary, two-year, and four-year school mathematics course offerings, serving as a common ground upon which these institutions could build pedagogical and curricular alignment. But is this happening? This talk explores the distinctions in the teaching and learning of differential calculus at the high school, two-year, and four-year college level. (Received September 16, 2014)