1145-R1-1166 Eric Sullivan* (esullivan@carroll.edu) and Jodi Fasteen (jfasteen@carroll.edu).

Integrating Programming Education Across the Undergraduate Math Curriculum.

Our undergraduate STEM students take a sequence of four courses in their first two years, each of which is paired with a weekly 75-minute computer lab period that has a dual purpose of both computationally exploring the mathematical concepts from the lecture portion of the course, while simultaneously teaching programming fundamentals. Building on this foundation, we require significant programming assignments for our upper division students, requiring them to regularly use and apply their programming skills to investigate mathematical topics. In this presentation we will showcase sample programming assignments, and discuss transferability of skills, assessment of programming, suggestions for multi-section courses, and logistical concerns. (Received September 19, 2018)