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Mark H Goadrich* (goadrich@hendrix.edu), Department of Mathematics / Computer Science, 1600 Washington Avenue, Conway, AR 72032. *Incorporating Successful MCM Strategies Into Curricular Learning Outcomes.*

In our Scientific Computing course at Hendrix College, students learn the techniques of data visualization, clustering, dynamical systems modeling through both differential equation approximation and agent-based modeling, Monte Carlo simulations, and global search algorithms. For the latter half of the course, students work in teams on a final project, where they choose a problem from a previous MCM, develop and test models supported with multiple figures and graphs, and write an extensive paper on their findings following the expected style of MCM solutions. Additionally, through participating in the MCM and writing a reflection paper on their experience, our students can earn one of their three required engaged learning credits. This tight integration of modeling techniques into our curriculum has proven successful, both in recruiting students to work on the MCM each year, and preparing them for producing MCM entries with the expected rigor and structure of Meritorious solutions. (Received September 13, 2020)