

1145-R1-2116 **Holly Hirst*** (hirsthp@appstate.edu), Box 32092, Appalachian State University, Boone, NC 28608, and **Gregory Rhoads** (rhadsgs@appstate.edu), Box 32092, Appalachian State University, Boone, NC 28608. *Designing a Computational Mathematics Course for Math Majors.*

This presentation will provide an overview of the sophomore computational mathematics course required for many of our math majors, specifically students concentrating in computation, life sciences, physical sciences or statistics. The course is also a popular math elective for other math majors. The computational mathematics course provides students with an overview of common computational tools – spreadsheets and computer math systems – and also introduces them to programming and issues that arise in numerical computation such as floating point arithmetic, error, and conditioning. The emphasis is on solving pure and applied mathematics problems, including numerical solution of problems encountered in calculus 1 and 2, the prerequisites for the course. (Received September 24, 2018)