1086-H5-2619 Eric J Kostelich* (kostelich@asu.edu), School of Mathematical & Statistical Sciences, Arizona State University, Tempe, AZ 85287-1804. : Development of an undergraduate course in mathematics and climate. Preliminary report.

This talk describes the content of an undergraduate course in mathematics and climate to be offered at Arizona State University. The target audience is second- and third-year mathematics majors (i.e., those who have completed the usual course sequence in calculus and ordinary differential equations). Topics include the basics of chaos (using Lorenz's 3-dimensional system as a model); the effects of uncertainties in data and parameters; and development of simple box models of the climate system. (Received September 25, 2012)