

1014-G1-749 **Michael Huber*** (am6996@usma.edu), Department of Mathematical Sciences, 646 Swift Road, West Point, NY 10996, and **Alex Heidenberg, Richard Brown, Gabriel Costa** and **Jason Miseli**. *Modeling Problems and Remodeling Attitudes*. Preliminary report.

The USMA mathematics curriculum focuses on applying mathematics to model and solve problems, combining theory with modeling and approximation techniques. Applying mathematics consists of formulating and solving mathematical problems as well as interpreting and explaining results. Students who validate single-variable calculus are placed into a freshman modeling course which emphasizes technology and differential equations. Multi-variable calculus follows in the second semester. For most students, modeling to solve problems is a new concept. Combining modeling with studying a tough subject, ordinary differential equations, as a first-semester freshman requires a change in attitude as well. This presentation will address the unique challenges faced and offer assessment techniques and lessons learned. (Received September 23, 2005)