William P Fox* (wpfox@nps.edu), Department of Defense Analysis, Naval Postgraduate School, Monterey, CA 93943. Mathematical Modeling, MCM, and HiMCM.

Mathematical modeling as a course will be discussed as well as pointers for preparing teams as faculty advisors for the MCM and HiMCM contests in modeling. Philosophy and content areas of mathematical modeling will be addressed. Several modeling scenarios will be quickly developed into modeling process framework. Problem identification, brain storming and assumptions, and building the model will the main focus. I also will briefly discuss a modeling exercise with a catapult that bridges all modeling steps and allows students to participate in the process and be part of the strengths and weaknesses in the process. It is a good motivational hands-on exercise. (Received September 11, 2007)