Monika Keindl* (monika.keindl@nau.edu). Building problem solving skills from existing mathematical knowledge.

There is a common misconception about mathematics among prospective math majors and minors. Many of them equate procedural competency with general mathematical skills. A problem solving course was developed to remedy this misconception. This new course is designed as a possible prerequisite for a first course in proof writing. The focus is on mathematical reasoning and communication through exposure to multi-step problems that only require elementary mathematical knowledge not much beyond precalculus. This talk will explore experiences and challenges in teaching this course using IBL approaches. (Received September 24, 2017)