

1116-C5-1802      **M. Reba\*** (mreba@clemson.edu), Department of Mathematical Sciences, O-110 Martin Hall, Box 34097, Clemson, SC 29634, and **M. Burr**. *Problem-Solving, Self-Reflection, and Communication*.

Presented with the challenge of designing a freshman/sophomore level course with a critical-thinking emphasis, we created a special section of our existing Liberal Arts Mathematics course, and this section has been offered every semester since Fall 2014. We use a new text that focuses on solving puzzles and practical problems while introducing recurring mathematical representations and strategies. We incorporate contemplative practices, interpreted as self-reflection on the process of solving problems, to encourage students to experience mathematical thinking. Several times throughout the semester, students are assigned questions about a specific problem, asking them to think about what they know and don't know, what a solution would look like, what strategy is applicable, what representations are useful and why, etc. They are asked to type and submit concise answers to these questions. As a result, by the end of the semester, many students improve their ability to communicate, exhibit a self-awareness when engaging with the material, and better understand the role of creativity in mathematical problem-solving. (Received September 21, 2015)