

1035-T1-1951 **Theresa L. Friedman*** (tfriedma@mesastate.edu), Mesa State College, Mathematics Department, 1100 North Avenue, Grand Junction, CO 81501-3122. *A Professional Skills Preparation for the Senior Research Experience*. Preliminary report.

Mathematics majors at Mesa State College complete a senior research project in order to gain a valuable experience outside of the traditional curriculum. Success in such a project requires a range of capabilities, many of which we found to be lacking in our students. In particular, we identified weaknesses in library research skills and in using software such as Maple, Excel and LaTeX. Even such basic skills as reading, writing, and presenting take on new meaning (and difficulty) when applied to mathematics topics. Thus, we designed a prerequisite to the research experience in which students learn a variety of professional skills, including those mentioned above, that prepare students for successful completion and exposition of a research project. With this additional preparation, students spend their research semester working on their project instead of trying to learn Maple, LaTeX, or how to make Microsoft Equation Editor work in PowerPoint. In this talk, we will discuss the design of the prerequisite course (now in its third year) including the topics covered and the organization of topics, as well as our assessment of student performance and of the course itself. (Received September 20, 2007)