1067-Y5-1753   **Veronika Furst*** (`furst_v@fortlewis.edu`), Fort Lewis College, Department of Mathematics, 1000 Rim Drive, Durango, CO 81301. *Teaching operator theory to undergraduates via frames.* Preliminary report.

During the summer of 2010, I had the opportunity to teach a two-week minicourse entitled "Operator Theory Via Finite Frames," as part of The George Washington University Summer Program for Women in Mathematics. Every one of the sixteen students had had a course in linear algebra, some had seen real analysis while others had taken abstract algebra. With this background, I was able to present sophisticated notions in finite-dimesional operator theory, using finite frames as a motivation throughout. In this talk, I will give a brief introduction to the theory of frames and explain the rationale behind using this topic as an ideal foundation for a minicourse, a project within a course, or a semester-long topics course to follow linear algebra. I will point out references for undergraduate-accessible course material as well as possible projects. Natural extensions into infinite-dimensional spaces, infinite frames, and Parseval wavelets will be briefly discussed. (Received September 21, 2010)