1014-T1-1633 Maria Cristina Villalobos* (mcvilla@utpa.edu), Department of Mathematics, University of Texas-Pan American, 1201 W. University Drive, Edinburg, TX 78539. A Modeling Project in Linear Programming. Preliminary report.

We present an application project in linear programming suited for undergraduate or graduate students. The project involves modeling faculty teaching workload in a department, which results in an integer linear program. Currently, some departments have a faculty member who assigns classes to faculty based on a pen-and-paper method or by trial and error. Thus, to help departments with this time-consuming task, we propose to establish groups of students to help model and solve the integer linear program, thereby gaining experience and knowledge in solving real-world problems. In addition, we present some issues that may arise when working with students and this project. (Received September 28, 2005)