1067-B1-1002          **Daniel T Kaplan*** (`kaplan@macalester.edu`), Dept. of Math, Statistics, and CS, Macalester College, 1600 Grand Ave., Saint Paul, MN 55116. *Confounding the Traditional Introductory Statistics Course.*

The canonical culminating feature of a traditional introductory course is the t-test. The t-test provides a vehicle to present some concepts, but it poorly reflects contemporary statistical practice and it's of little use in introducing other important statistical concepts such as confounding and adjustment. At Macalester, we have designed an introductory statistics course oriented to take confounding and adjustment head on. The course uses multivariate linear models as the basis for descriptive and inferential statistics. To make this accessible to students without watering down the statistics or the mathematics, we have developed an innovative geometrical exposition of the linear algebra underpinnings, and we make extensive use of computation for simulations and randomization-based explorations (as well as for the conventional calculations). The course was developed as an experiment, but for the last five years, it has been the mainstream introductory statistics course, taken by fully one-quarter of the student body and required for majors as diverse as biology, economics, and mathematics. Student and faculty response has been extremely positive. (Received September 17, 2010)