1067-B1-1940   **Todd M Swanson*** (`swansont@hope.edu`), Mathematics Dept, 27 Graves Place, Holland, MI 49424-9000, and **Jill L VanderStoep** (`vanderstoepj@hope.edu`), Mathematics Dept, 27 Graves Place, Holland, MI 49424-9000. *An Active Approach to Statistical Inference using Randomization Methods.* Preliminary report.

We have significantly changed our introductory statistics course in both content and pedagogy. We use an intuitive approach to introduce inferential statistics using permutation tests and other randomization methods. This means that in the first week of the course students begin to understand the structure of a test of significance, what a sampling distribution is, and what a p-value means. This early introduction to the inferential statistical process allows us to cycle through the core logic of inference throughout the course. Therefore, we teach inference for an entire semester instead of just half a semester as is traditionally done. Because we spend more time with inference, our students develop a deeper understanding of the entire statistical process. We have also moved from a mainly lecture based class to one that is driven by group work, self-discovery, active-learning and tactile demonstrations using case studies, projects, and research articles. Our paper will include an overview of our curriculum, an example of a permutation test, sample class activities, and examples of student work. (Received September 22, 2010)