## 1014-M1-1484 Christopher D Oehrlein\* (coehrlein@okccc.edu). Mathematics in Officiating: Data Sets and Voting Records for Introductory Statistics and Quantitative Literacy Classes.

Most sports examples in Introduction to Statistics and Quantitative Literacy courses and textbooks involve player or team statistics. What about the referees, umpires and judges? Some Major League Baseball teams keep pitching charts on all the umpires just like they do for opposing pitchers and batters. State organizations generate pages of referee and umpire rankings to determine high school sports playoff assignments. The International Olympic Committee just completed a mysterious and elaborate process to determine the site of the 2012 Summer Games. These examples come from a variety of sources: locally and nationally distributed newspapers and magazines, officiating organization publications, and state athletic association documents and websites. They provide contemporary and unique settings for students in introductory and general education mathematics classes to perform some analysis of the data and processes as classroom exercises or exam problems. Examples include situations related to voting procedures, hypothesis testing comparing means and proportions, and analysis and inference with tables involving two categorical variables. (Received September 28, 2005)