1046-P1-1225   **William P Fox*** (`wpfox@nps.edu`), Department of Defense Analysis, Naval Postgraduate School, Monterey, CA 93943. *The "Artist Guild" Strike: An Example of Game Theory.*

In our 3rd course in mathematical modeling, we teach modeling for decision making. The course covers some linear programming, risk analysis, decisions under risk, and game theory. Our coverage of game theory is fairly complete covering theory and applications of zero-sum games, non-zero sum games, Nash arbitration, and "n"-player games. This past year, we modeled the "artist guild" strike as a 2-person non-zero sum game. We used the von Neumann and Morgenstern method of lottery to obtain the pay-off matrix and Nash Arbitration to show an acceptable result. We will also present our graphical approach to Nash Arbitration in this example that we teach our students. (Received September 15, 2008)