

# ESD.864 CLASS CASE: SPORTS

## Sports Statistics

Released Thursday, March 21. Memo due Thursday, April 11. Presentation Thursday, April 18.

The movie “Moneyball” drew widespread attention to a phenomenon that has emerged over the past decade: the use of statistical information in making decisions in the context of sports. Traditionally, decision-making about hiring and strategy was based on “gut feeling” or knowledge acquired through experience. Numerical methods to quantify decision-making sometimes go against conventional wisdom -- but potentially result in improved outcomes. In baseball, this is known as “sabermetrics” -- the Boston Red Sox, for example, have a computer program named Carmine to analyze statistics in their staffing and player operations.

Your task as a group is to explore the use of statistical information and numerical models in sports decision-making. You can choose to address any sport in which your group has an interest. Focus on lessons that might be applicable across the domains of interest to the class.

A few references to get you started are academic papers and some media articles to help you think about potential public reactions. Look also at the materials for the MIT Sloan Sports Analytics Conference, <http://www.sloansportsconference.com/>. The book *Moneyball* by Michael Lewis, which was the basis for the movie mentioned above, may also be useful, as will be the chapter from *The Signal and the Noise*. You are expected and encouraged to do further research on your own.

Remember to follow the general instructions for your memo and presentation. In addition, for this case, you should remember that whatever sport you choose, many of your classmates will not be familiar with the details -- be sure you describe in both your memo and presentation whatever sports knowledge is needed to understand your points.

+1 Extra credit for festive team attire.\*

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\*Negative extra credit for certain teams from New York, Los Angeles, or Montreal.

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