

Statistics NSC123

Time: TuTh 8.30–9.50am

Place: Sci217

Level: Introductory

Credits: 4

Instructor: Matt Ollis

Email: matt@marlboro.edu

Website: <http://cs.marlboro.edu/courses/spring2009/statistics/home>

Blurb: Statistics is the science—and art—of extracting data from the world around us and organising, summarising and analysing it in order to draw conclusions or make predictions. The core of the course follows Chapters 1 to 12, Chapters 14 to 19, and Chapters 22 to 25 of David S. Moore’s *The Basic Practice of Statistics* (4th ed.) (with a few omissions to be announced as we proceed). Topics include: probability theory, collecting and describing data, hypothesis testing, correlation and regression, and analysis of variance. In addition to this core, we pursue a small number of other topics depending on the interests of the class. Options include more probability theory, a wider array of statistical tests, and more experience with “real world” applications. Two themes running through the course are the use of statistics in the natural and social sciences and the use (and abuse) of statistics by the news media.

Grading: Your final grade will be weighted as follows. Quizzes: 10%; final project: 20%; homework assignments: 30%; final exam: 40%. Homework will be approximately weekly. There will be two in-class quizzes during the semester and an optional third quiz during reading days—your best two will be worth 5% each. The final project will consist of a write-up and a class presentation and will involve either examining the use of statistics in some aspect of public life or looking at a specific use of statistics in your principal academic field. The final will be a 24-hour open-book take-home exam.

What now?: If you would like to take the course, then send me an email saying “Sign me up for Statistics!” or something similar. Before class on Tuesday, you should read the articles listed as Assignment 0 on the webpage.

Academic Integrity: You are expected to be aware of the college’s policy on academic integrity and to abide by it. It can be found on the college website, and is linked from the course website. Please come and talk to me if anything is unclear.