

## Greetings, 2011-2012 EVHS A.P. Statistician!



We're Ken Mulsoff and Judy Hoffman, EVHS teachers who will be leading the AP Statistics course in 2011-2012. We suspect that the academic challenges of next fall may not be at the forefront of your thoughts right now, but perhaps things will change over the summer! We write to offer you a few ways to be a step ahead with a pre-warmed brain when AP Statistics gets rolling in September.

**First**, poke around under "AP Statistics" at the Eastview Stats site: <http://www.district196.org/evhs/People/mulsoffweb/>  
You'll find tips, hints, etc., and learn about the basics of AP Stats at Eastview.

**Second**, keep your eyes & ears open for the stats you're exposed to every day.....

The weather broadcaster will tell you today's average high temperature, and will often compare today's high with the average, but how do they really compare? Are you told how unusual today is compared to the average? How would you decide if a day is unusually hot or cool? How many degrees above the average make a day really unusual? What information could be given to help you make this decision?

Medical studies are often in the news. Do certain foods/drinks really extend (or shorten!) human life? How much does smoking really harm you? Are the people who volunteer for medical studies just like the rest of folks? Should I spend money on vitamins?

Elections are coming! Every good poll reports a margin of error, with a specified confidence level. What the heck is that truly measuring, what does it mean, and how is it calculated?

**Third**, there are many good books that deal with deep statistical ideas without getting too technical. Consider picking up one of these and giving it a read before school starts. (stars indicate favorites and/or an especially high recommendation)

\*\* **Outliers**, by Malcolm Gladwell. Little, Brown, & Co 2008

\*\* **Innumeracy**, by John Allen Paulos. Hill and Wang

\*\* **Freakonomics: A Rogue Economist Explores the Hidden Side of Everything**, by Levitt & Dubner, 2005.

\*\* **A Mathematician Reads the Newspaper**, by J. A. Paulos. Basic Books, 1995.

\*\* **Moneyball: The Art of Winning an Unfair Game**, by M. Lewis. Norton, 2003

(tells how the Oakland A's revamped their baseball team using basic stats)

\* **The Lady Tasting Tea**, by D. Salsburg. Owl Books, 2001

\* **200% of Nothing**, by A. K. Dewdney. John Wiley and Sons, 1993.

**Bringing Down the House: How Six Students Took Vegas for Millions**, by Ben Mezrich

(Breaking Vegas & "21" movie are based on this book). Free Press

**Fooled by Randomness: The Hidden Role of Chance in Life and in the Markets**, by N. Taleb. Thomson, 2004

**The Black Swan: The Impact of the Highly Improbable**, by N. Taleb. Thomson, 2007

**Tainted Truth: The Manipulation of Fact In America**, by C. Crossen

**The Ghost Map: The Story of London's Most Terrifying Epidemic—and How**

It Changed Science, Cities, and the Modern World, by S. Johnson

**The Tipping Point: How Little Things Can Make a Big Difference**, by M. Gladwell, Little, Brown & Co., 2002

**Fourth**, as you complete THIS academic year, make sure you 'finish strong' and are fully prepared for the AP Statistics opportunity. As described in the materials available when you registered, you must be a self-motivated student with a very strong Algebra II background -- generally 'A' grades, possibly 'B' -- and, even more important, very strong scholarship and attendance habits. If you fit this description, super! If not, you might want to reconsider your course selection. Contact one of us (or your guidance counselor) with any questions.

So...those were a few ideas to keep (or get!) your stat-brain rolling. Watch out -- if you're not careful, you might notice stats around you all the time. We can't wait to see you all in fall. In the meantime, we hope your summer is statistically significantly great. (p-value < 0.05)

If you have any questions about anything, feel free to send a note.

Hi! I'm the  
Stats Fairy.

