

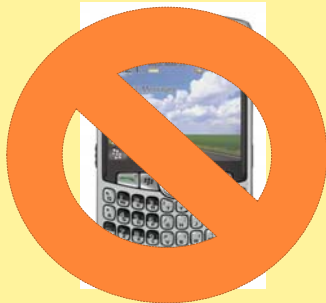
STA291
Spring 2009

LECTURE 1
THURSDAY, 15 January 2009

Welcome to STA291!

- Class Instructor: Dr. Ruriko Yoshida
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<http://polytopes.net/courses/STA291S09/>
- Office: 805A P.O.T.
- Office Hours: 3 – 4 PM, TR and by special arrangement

Please . . .



Course Topics

- Statistical Terminology
- Descriptive methods
- Probability and distribution functions
- Estimation (confidence intervals)
- Hypothesis testing
- Inferential methods for two samples
- Simple linear regression and correlation

Fundamental Topics

- Sampling Distribution (Ch. 9)
- Confidence Interval (Ch. 10)
- P-value of a Statistical Test (Ch. 11)

Why Statistics?

- Job market: Most graduates need to be familiar with basic statistical methodology
- Computers make even complex statistical methods easier to use
 - danger of using inappropriate methods
 - vital to understand a method before using it
- Research in the sciences is getting more quantitative (look at research journals)

Why Statistics? (cont'd)

- Newspaper, advertising, surveys... many statements contain statistical arguments
- Examples from Herald Leader the last spring:

Keeneland: January horses of all ages sale

	Yesterday's sessions	Same session a year ago
Number sold	195	211
Number not sold	95	80
Gross sales (in millions)	21.3	23
Average price	109,284	89,926
Median price	\$5,000	\$5,000

Yesterday's top price \$2.7 million
Name: Hip No. 284, Irish Cherry, a chestnut mare
Sex: Irish Open **Dam:** Eston **Dam's sire:** Ancestral
Sold by: Hill 'n' Dale Sales Agency, Agent
Bought by: Southern Equine Stables

FOR COMPLETE RESULTS, GO TO WWW.KEENELAND.COM

local version

TALLY OF DEATHS IN 3 YEARS AFTER INVASION UNLIKELY TO END DEBATE

Associated Press

AP About 135,000 troops died from violence in the three years after the United States entered, contributes the same effort to its count deaths, one that still may not settle the fierce debate over the war's true toll on civilians and others.

AP The estimate comes from projections by the World Health Organization and the Iraqi government, based on data in their survey of nearly 150,000 households. Experts labeled it the largest and most credible study of the Iraq death toll since the war began.

AP No British line is as lower than the 600,000 deaths reported in an earlier study in the journal The Lancet, but higher than numbers from other groups tracking the count.

AP The new estimate covers a period from the start of the war in March 2003 through June 2006. It covers more than the tally's reach health records gone in war 2006, based on 100 bodies at the arrival of morgues and hospitals. The number shocked people in and outside Iraq, because it was so much higher than previously accepted estimates.

AP No official count has ever been available. While the U.S. military says it does not track

How to Succeed in STA291 (but it takes really trying. . .)

- Don't procrastinate
- Logical thinking
- Perseverance
- ...+ see Syllabus (attend lectures and labs, obtain material when absent, do homework yourself, etc.)
- **Make sure you get quickly set up and become familiar with the online homework system**
- Don't procrastinate ☺

Homework One

- Get registered on CengageNOW by Saturday, January 17, by 11 p.m.
- Start bringing 4" x 6" cards to lecture every day starting next time!
