

STA291
Fall 2009



LECTURE 1
THURSDAY, 27 August 2009

Welcome to STA291!



- **Class Instructor: Dr. Ruriko Yoshida**
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<http://polytopes.net/courses/STA291F09/>
- **Office: 805A P.O.T.**
- **Office Hours: 10:30AM – 11:20 AM, 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 and Ch. 12)**
- **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:

Keeneland: January horses of all ages sale

	Yesterday's sessions	Same session a year ago
Number sold	195	211
Number not sold	96	80
Gross sales (in millions)	21.3	19
Average price	109,364	89,905
Median price	55,000	55,000

Yesterday's top price \$2.7 million

Name: Hip No. 284, Irish Cherry, a chestnut mare

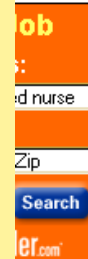
Sire: Irish Open **Dam:** Eston **Dam's sire:** Ancestral

Sold by: Hill 'n' Dale Sales Agency, Agent

Bought by: Southern Equine Stables

FOR COMPLETE RESULTS, GO TO WWW.KEENELAND.COM

popup window.



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

By Marilyn Marchione
ASSOCIATED PRESS

About 151,000 Iraqis died from violence in the three years after the United States invaded, concludes the best effort yet to count deaths, one that still may not settle the fierce debate over the war's true toll on civilians and others.

The estimate comes from projections by the World Health Organization and the Iraqi government, based on door-to-door surveys of nearly 10,000 households. Experts called it the largest and most scientific study of the Iraqi death toll since the war began.

Its bottom line is far 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.

The new estimate covers a period from the start of the war in March 2003 through June 2006. It closely mirrors the tally Iraq's health minister gave in late 2006, based on 100 bodies a day arriving at morgues and hospitals. His number shocked people in and outside Iraq, because it was so much higher than previously accepted estimates.

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 MyStatLab and do the simple exercises where questions are posted at <http://polytopes.net/courses/STA291F09/ChOIntro.pdf> by Friday, September 4th, by 11 p.m.
- Start bringing 4" x 6" cards to lecture every day starting next time!