

**Stats 001 (Section 4)**

Fall 2007

CSUS

Classroom: Sequoia Alpine 227

Meeting Times: MWF 12 – 12:50 PM

**Prerequisites:**

**A grade of at least 29/45 in the Intermediate Algebra Diagnostic Test (IAD)**

**Evidence must be presented before Monday September 10**

**Instructor** : Rafael E Díaz, PhD

BRH 136

Tel: 278-6221

email: rdiaz@csus.edu

Office Hours:

M: 11 AM – Noon

T: 11:30 AM – 12:30 PM

W: 1-2 PM

**Course Materials:** Textbook: Statistics, The Art and Science of Learning from Data by Alan Agresti and Christine Franklin (ISBN: 0-13-008369-0), scientific calculator (no cell phone calculators), paper for notes

**Assignments:** Weekly assignments of about 20 exercises (approximately 2-3 hours of work at home per week) will be due on Mondays at the beginning of the class. I will grade randomly 4 or 5 exercises only and, grades will be based on these exercises. So, complete assignments increase the chances of a good grade. **Late assignments won't be accepted, NO EXEPTIONS**

**Final Grade Distribution:**

6% Attendance and Participation

10% Assignments

54% 3 Midterm Exams (18% each)

30% Cumulative Final Exam

**No make up exams, NO EXEPTIONS**

**Note:** If you have a disability and require accommodations, you need to provide disability documentation to SSWD, Lassen Hall 1008, (916) 278-6955. Please discuss your accommodation needs with me after class or during my office hours early in the semester

**Cumulative Final Exam: Friday December 21, 2007 (10:15 AM – 12:15 PM)**

## **Grading Policy:**

93-100	A
90-92.9	A-
87-89.9	B+
83-86.9	B
80-82.9	B-
77-79.9	C+
73-76.9	C
70-72.9	C-
67-69.9	D+
63-66.9	D
60-62.9	D-
below 60	F

## **Syllabus**

- 09/05/07 1.1. How Can You Investigate Using Data?  
1.2. We learn About Populations Using Samples  
1.3. What Role do Computers Play in Statistics?**
- 09/07/07 2.1. What are the Types of Data?  
2.2. How Can We Describe Data Using Graphical Summaries?**
- 09/10/07 2.2. How Can We Describe Data Using Graphical Summaries? (Cont.)  
2.3. How Can We Describe the Center of Quantitative Data?**
- 09/12/07 2.4. How Can We Describe the Spread of Quantitative Data?**
- 09/14/07 2.5. How Can Measures of Position Describe Spread?**
- 09/17/07 2.6. How are Descriptive Summaries Misused?**
- 09/19/07 3.1. How Can We Explore the Association Between two Categorical Variables?**
- 09/21/07 3.2. How Can We Explore the Association Between two Quantitative Variables?**
- 09/24/07 3.3. How Can We Predict the Outcome of a Variable?**
- 09/26/07 3.4. What are Some Cautions in Analyzing Associations?**
- 09/28/07 4.1. Should We Experiment or Should We Merely Observe?  
4.2. What Are Good Ways and Poor Ways of Sampling?**

**10/01/07 4.3. What Are Good Ways and Poor Ways to Experiment?  
4.4. What Are Other Ways to Perform Experimental and Observational Studies?**

**10/03/07 Exam I**

**10/05/07 5.1. How Can Probability Quantify Randomness?  
5.2. How Can We Find Probabilities?**

**10/08/07 5.2. How Can We Find Probabilities? (Cont.)  
5.3. Conditional Probability: What's the Probability of A, Given B?**

**10/10/07 5.4. Applying the Probability Rules**

**10/11/07 6.1. How Can We Summarize Possible Outcomes and Their Probabilities?**

**10/15/07 6.2. How Can We Find Probabilities for Bell-Shaped Distributions?**

**10/17/07 6.3. How Can We Find Probabilities When Each Observation Has Two Possible Outcomes?**

**10/19/07 6.3. How Can We Find Probabilities When Each Observation Has Two Possible Outcomes? (Cont.)  
6.4. How Likely Are the Possible Values of a Statistics? The Sampling Distribution**

**10/22/07 6.4. How Likely Are the Possible Values of a Statistics? The Sampling Distribution**

**10/24/07 6.5. How Close Are Sample Means to Population Means?  
6.6. How Can We Make Inferences About a Population?**

**10/26/07 6.1. Introducing Normally Distributed Variables  
6.2. Areas Under the Standard Normal Curve**

**10/29/07 7.1. What Are Point and Interval Estimates of Population Parameters?  
7.2. How Can We Construct a Confidence Interval to Estimate a Population Proportion?**

**10/31/07 Exam II**

**11/02/07 7.2. How Can We Construct a Confidence Interval to Estimate a Population Proportion? (Cont.)  
7.3. How Can We Construct a Confidence Interval to Estimate a Population Mean?**

**11/05/07 7.3. How Can We Construct a Confidence Interval to Estimate a Population Mean? (Cont.)**  
**7.4. How Do We Chose the Sample Size for a Study?**

**11/07/07 7.4. How Do We Chose the Sample Size for a Study? (Cont.)**  
**7.5. How Do Computers Make New Estimation Methods?**

**11/09/07 8.1. What Are the Steps for Performing a Significance Test?**  
**8.2. Significance Tests About Proportions**

**11/12/07 Veteran's Day (Holiday Observed)**

**11/14/07 8.2. Significance Tests About Proportions (Cont.)**

**11/16/07 8.3. Significance Tests About Means**

**11/19/07 8.3. Significance Tests About Means (Cont.)**  
**8.4. Decisions and Types of Errors in Significance Tests**

**11/21/07 8.5. Limitations of Significance Tests**  
**8.6. How Likely is a Type II Error**

**11/22/07 – 11/23/07 Thanksgiving (Holiday Observed)**

**11/26/07 Selected Topics of Chapter 9**

**11/28/07 Selected Topics of Chapter 9**

**11/30/07 Selected Topics of Chapter 9**

**12/03/07 Selected Topics of Chapter 10**

**12/05/07 Exam III**

**12/07/07 Selected Topics of Chapter 10**

**12/10/07 Selected Topics of Chapter 11**

**12/12/07 Selected Topics of Chapter 11**

**12/14/07 Selected Topics of Chapter 11**