

**INTRODUCTION TO STATISTICAL ANALYSIS
BIostatISTICS 183
Fall 2010**

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Please include "BIostat183" in email subject lines so we can make sure that they do not get caught in spam filters.

Class Meetings: 10:00 a.m. to 12:00 p.m. Tuesday & Thursday in N-217
Problem Session: Wednesday, 4 - 5 p.m. – LH 382

TEXTBOOK (On reserve in the UCSF Library)

Primer of Biostatistics (6th ed.) By S.A. Glantz (McGraw-Hill) - 2005

Errata for book (fourth and fifth printings) available at on reserve in Library at

<http://ereserves.library.ucsf.edu/eres/coursepage.aspx?page=docs&return=courses.aspx&cid=72>

Old exams are at <http://ereserves.library.ucsf.edu/eres/coursepage.aspx?page=docs&return=courses.aspx&cid=127>

GRADING

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| Homework | 20% |
| Midterm | 30% |
| Final | 50% |

The grade on the final is the lowest grade you can get in the course. The midterm and final will be in class and open book.

HOMEWORK

Is assigned on this schedule and will be due one week after it is assigned. Homework will be graded and returned within one week. No late homework will be accepted. Appropriately annotated computer printouts may be submitted for selected problems, indicated with an asterisk on the assignment.

VIDEOTAPES of all lectures from a previous year (which are similar) will be available at the Circulation desk in the UCSF library and can be viewed there..

AUDITORS

Welcome if they do homework and take tests.

CLASS SCHEDULE, READING AND HOMEWORK ASSIGNMENTS

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| Thursday, September 23 | <i>Introduction Sampling, Experimentation, Measurement</i> Reading: Chapter 1 and 2 Homework: Critique AMortality before and after the 2003 Invasion of Iraq,@ by Roberts et al <i>Lancet</i> 2004; 364 (9448): 1857-64 |
| Tuesday, September 28 | <i>Descriptive Statistics</i> Homework: Chapter 2: Probs. 2.2-2.5 |
| Thursday, September 30 | <i>Analysis of Variance</i> Reading: Chapter 3 |
| Tuesday, October 5 | <i>Analysis of Variance (continued)</i> Homework: Chapter 3: Probs. 3.1, 3.4-3.6, 3.7* |
| Thursday, October 7 | <i>t-tests, Multiple Comparisons</i> Reading: Chapter 4 |

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| Tuesday, October 12 | <i>Multiple Comparisons (continued)</i> Homework: Chapter 4: Probs. 4.1, 4.2, 4.4, 4.5, 4.8*, 4.11, 4.13* |
| Thursday, October 14 | <i>Rates and Proportions</i> Reading: Chapter 5 |
| Tuesday, October 19 | <i>Rates and Proportions (continued)</i> Homework: Chapter 5: Probs. 5.2*, 5.3, 5.5-5.7, 5.10, 5.13 |
| Thursday, October 21 | <i>Power and Sample Size</i> Reading: Chapter 6 Homework: Chapter 6: Probs. 6.1-6.3, 6.9, 6.10 |
| Tuesday, October 26 | <i>Confidence Intervals</i> Reading: Chapter 7 Homework: Chapter 7: Probs. 7.2, 7.3, 7.6 |
| Thursday, October 28 | MIDTERM (Will cover material through October 22) |
| Tuesday, November 2 | <i>Regression and Correlation</i> Reading: Chapter 8 |
| Thursday, November 4 | <i>Regression and Correlation (continued)</i> Homework: Chapter 8: Probs. 8.1*, 8.2*, 8.3, 8.6*, 8.9*, 8.10 |
| Tuesday, November 9 | <i>Repeated Measures (paired t-test)</i> Reading: Chapter 9 Homework: Chapter 9: Probs. 9.1, 9.2* |
| Thursday, November 11 | Veterans' Day Holiday |
| Tuesday, November 16 | <i>Nonparametric Methods</i> Reading: Chapter 10 |
| Thursday, November 18 | <i>Nonparametric Methods (continued)</i> Homework: Chapter 10: Probs. 10.1-10.3, 10.7 |
| Tuesday, November 23 | <i>Survival Analysis</i> Reading: Chapter 11 |
| Thursday, November 25 | Thanksgiving Holiday |
| Tuesday, November 30 | <i>Survival Analysis (continued)</i> Homework: Chapter 11: Probs. 11.1, 11.3 (Due December 2) |
| Thursday, December 2 | <i>Summary & Conclusion</i> Reading: Chapter 12 |
| Tuesday, December 7 | FINAL EXAM HSW-302 (Noon - 3 p.m.) |

*Appropriately annotated computer printouts may be submitted
 Edited 10/2/10