

## MATH 1070-20 Autumn 2009

### Intro to statistical Inference

**Department:** Math

**Prerequisite:** Math ACT score of 23 or grade of C or better in MATH 1010.

**Credit Hours:** 3

**Times and Location:** W 04:10 PM- 7:10 PM Bountiful 303

**Instructor:** Beth Malloy, Associate Instructor

**Office Hours:** There are no official office hours. Please talk to me before or after class, or email at: [beth.malloy@comcast.net](mailto:beth.malloy@comcast.net). In case of bad weather call 581-8821 to find out if class is canceled.

**Course Description:** Fulfills Quantitative Reasoning (Statistics/Logic).

The important topics used in making inferences from data will be presented and illustrated. As well as made on descriptive statistics, estimation of the mean, or of the proportion, in one or two populations, simple linear regression, and one-way analysis of variance are covered.

**Teaching and learning methods:** Class lectures and working homework problems are the primary source for learning. Completing the homework is essential to the understanding of the material. Make sure that you ask me questions about the problems you don't understand.

<b>Grading:</b>	Homework	20%
	2 Exams	25% each
	Final	30%

I will be grading on a curve for the class.

**Text:** The Basic Practice of Statistics, 5<sup>th</sup> Edition; David S. Moore

**Content Overview:** Exploring Data with Graphs and Numerical Summaries, Correlation and Regression, Confidence Intervals, Significance tests about Hypothesis, Comparing two Groups, Chi-Square, inference for regression, ANOVA, non parametric test.

## SCHEDULE

Week 1: Chapters 1,2	Exploring Data with Graphs; Describing Distributions
Week 2: Chapter 3	Normal Distribution
Week 3: Chapters 4,5	Scatter plots and Correlation; Regression
Week 4: Chapter 5	Regression
Week 5: Chapter 8,9	Producing Data
Week 6: Chapter 10,11	<b>EXAM 1</b> Probability, Sampling Distributions
Week 7: Chapter 14,15	Inference; Confidence Intervals, Hypothesis Tests
<b>Fall Break Oct. 12-17</b>	
Week 8: Chapter 15	
Week 9: Chapters 14-17	Putting it all together, Conditions for inference, t score, t test
Week 10: Chapter 18,19	Two sample tests for sample mean, proportion vs sample mean
Week 11: Chapter 22	<b>EXAM 2</b> Chi-square
Week 12: Chapter 23	Linear regression
Week 13: Chapter 24	ANOVA
Week 14: Chapter 25	parametric vs non parametric tests
Week 15: Review	
Week 16: <b>Final December 16</b>	

**Note: This schedule is subject to change.**

**Faculty Responsibilities:** For complete list of responsibilities you can visit  
[www.admin.utah.edu/ppmanual/8/8-12-4.html](http://www.admin.utah.edu/ppmanual/8/8-12-4.html)

**ADA:** This act requires that reasonable accommodations be made for students with disabilities. The student must contact the Center for Disabled Student Services in the Union Bldg., and notify me.