

Introduction to Statistical Inference

Math 1070-001, Summer 2016

Class meets: 06/13/2016 to 08/02/2016

Time: MTH 09:00AM-10:30AM

Holidays: July 4 (Independence Day) and July 25 (Pioneer Day)

Place: BUC 301, This class will meet in **BUC 304 on July 14th only.**

Instructor: Sung Chan Choi, JWB 121

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Office Hours: MTH 11:00AM-12:30PM

Text: The Basic Practice of Statistics, by Moore, et. al., 6th edition (ISBN: 9781464104336)

Course Objectives:

Upon successful completion of this course, a student should be able to:

1. Be able to summarize the data using charts, graphs, histograms, and to calculate basic descriptive statistics like the mean, standard deviation, median and quartiles.
2. Work with the normal distribution and use table to find probabilities.
3. Understand the difference between correlation and causation.
4. Perform regression analysis and compute correlation.
5. Understand the Central Limit Theorem and the normality assumption.
6. Understand the basics of tests of significance and confidence intervals including z-tests, t-tests, proportion tests, Chi-square tests, ANOVA.
7. Be able to perform simple statistical analysis of large data sets using spreadsheets (throughout the whole course).

Prerequisites: "C" or better in (MATH 1010 OR MATH 1040 OR MATH 1050 OR MATH 1080 OR MATH 1090) OR Accuplacer CLM score of 50 or better OR ACT Math score of 23 or better OR SAT Math score of 540 or better.

Requirement Designation: Quantitative Reasoning (Statistics/Logic)

Grade Distribution:

Homework	20%
Midterm Exam 1	15%
Midterm Exam 2	15%
Midterm Exam 3	15%
Project	10%
Final Exam	25%

Grading Scale:

≥ 93	A	73 - 76	C
90 - 92	A-	70 - 72	C-
87 - 89	B+	67 - 69	D+
83 - 86	B	63 - 66	D
80 - 82	B-	60 - 62	D-
77 - 79	C+	≤ 59	E

Course Policies:

• General

- Exams are closed book, closed notes.
- You will need a calculator for this class. I do not have any preference regarding which calculator would be most useful, so you're welcome to choose for yourself. I will allow calculators on exams. No cell phone calculators will be allowed.
- **No makeup exams will be given.**

• Weekly Homework

- I will collect homework during the first class of each week. All of the homework assigned the previous week is due at that time.
- All homework must be written in a neat and organized form and stapled together.
- To get full credit for the homework, you **MUST** show all your work! If you turn in just the answers, with no work shown, you will get a 0 score for that problem except for multiple choice problems.
- **Late homework will NOT be accepted.**

• Midterms

- There will be three in-class midterm exams.
- 6/27(M), 7/14(H), and 7/26(M).
- You will need a calculator for this class. I do not have any preference regarding which calculator would be most useful, so you're welcome to choose for yourself. I will allow calculators on exams. No cell phone calculators will be allowed.

• Project

- There will be one project assigned.
- I will post the direction on Canvas by 6/30.
- It will be due in class 8/7(Sunday).
- **Late projects will NOT be accepted.**

• Final

- The comprehensive final exam will be on **August 4, from 3 PM to 5 PM.**
- BUC 301

Tutoring, Computer Lab, and Printing:

Free tutoring and free printing are available in the T. Benny Bushing Mathematics Center, located between LCB and JWB. The regular hours is M-Th 8:00am - 8:00pm, Fri 8:00am - 4:00pm. See <http://www.math.utah.edu/ugrad/mathcenter.html> .

Other Important Dates:

- 6/17(Fri): Last Day to Drop Class
- 7/1 (Fri): Last Day to Withdraw from class
- See <http://registrar.utah.edu/handbook/miscellaneous.php>

ADA:

The Americans with Disability Act requires that reasonable accommodations be provided for students with cognitive, systemic, learning and psychiatric disabilities. Please contact me at the beginning to discuss any such accommodations you may require for this course.