SYLLABUS - MATH 1070, Section 4, Fall 2017
Introduction to Statistical Inference

Instructor: Conor Tillinghast
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Class Hours: TH 2:00 – 3:20 PM, ST 104

Office Hours: TBA

Text: The Basic Practice of Statistics, by David S. Moore et al., 6th ed. (The 7th edition of the same text will also work)

Prerequisite: Completion, with a grade of C or better, of Math 1010 or Accuplacer CLM score of 50 or better.

Expected Learning Outcomes: Upon successful completion of this course, a student should be able to:
  - Summarize the data using charts, graphs, histograms, and to calculate basic descriptive statistics like the mean, standard deviation, median and quartiles.
  - Work with the normal distribution and use table to find probabilities.
  - Understand the difference between correlation and causation.
  - Perform regression analysis and compute correlation.
  - Understand the Central Limit Theorem and the normality assumption.
  - Understand the basics of tests of significance and confidence intervals including z-tests, t-tests, proportion tests, Chi-square tests, ANOVA and non-parametric tests.
  - Perform simple statistical analysis of large data sets using spreadsheets (throughout the whole course).

Evaluations:
  - **Weekly Homework:** There will be a homework approximately every week. Late work will not be accepted. Two of the lowest HW scores will be dropped at the end of the semester. Students using the 7th edition of the text must do the homework questions in the 6th edition. Scans of the homework problems from the 6th edition will be available online. Homework is due at the beginning of class. Online submissions of homework will not be accepted. If a conflict arises and you can not attend class to turn in homework, you must notify the instructor in advance via email.
  - **Quizzes:** There will be regular weekly quizzes, usually on Thursday. There will be no make-up or rescheduling of quizzes. Two of the lowest quiz scores will be dropped at the end of the semester. I reserve the right to give the quizzes at any time during the class period.
  - **Exams:** There will be two midterm exams and a final exam. Only the final will be comprehensive. The first midterm will be held in class **Thursday, October 5th**, and the second midterm will be held in class **Thursday, November 16th**. The final exam will be held on **Friday, December 15th, from 1:00 pm to 3:00 pm (same room as class)**. All exams, midterms and the final will only be given

at the scheduled time. Students are expected to arrange personal work around the announced dates. Please come by and talk to the instructor, ONLY in the event of the most extenuating of circumstances.
  - **Project:** Near the end of the semester, students will complete a project using spreadsheet software. For this you may use your own computer, or you may use the lab in the T. Benny Rushing Mathematics Center, Rm 155C, located underground between JWB and LCB.

Grading: The grades will be calculated as follows:

Homework	20%	A:	93 - 100	C-:	70 - 72
Quizzes	15 %	A-:	90 - 92	D+:	67 - 69
Exam 1	15 %	B+:	87 - 89	D:	63 - 66
Exam 2	15 %	B:	83 - 86	D-:	60 - 62
Project	5 %	B-:	80 - 82	E:	0 - 59
Final Exam	30 %	C+:	77 - 79		
		C :	73 - 76		

Canvas: Canvas will be used as the course webpage. Relevant files will be posted online on Canvas. Your grades will be posted regularly online as well. I encourage you to check your grades often in case there are any data entry mistakes.

Calculators: Calculators that do not connect to the internet may be used during quizzes and exams. Cell phones **may not** be used for this purpose (or any other purpose) during quizzes and exams.

ADA Statement: The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability Services (CDS), 162 Olpin Union Building, 581- 5020 (V/TDD). CDS will work with you and me to make arrangements for accommodations. All information in this course can be made available in alternative format with prior notification to CDS.

Student Responsibilities: All students are expected to maintain professional behavior in the classroom setting, according to the Student Code, spelled out in the Student Handbook. You have specific rights in the classroom as detailed in Article III of the Code. The Code also specifies proscribed conduct (Article XI) that involves cheating on tests, collusion, fraud, theft, etc. Students should read the Code carefully and know you are responsible for the content. According to Faculty Rules and Regulations, it is the faculty responsibility to enforce responsible classroom behaviors, beginning with verbal warnings and progressing to dismissal from class and a failing grade. Students have the right to appeal such action to the Student Behavior Committee: http://regulations.utah.edu/academics/6-400.php

Inclusivity: Professional courtesy and sensitivity are especially important with respect to individuals dealing with differences of race, culture, religion, politics, sexual orientation, gender, gender variance, and nationalities. Class rosters are provided to the instructor with the student's legal name as well as preferred name. I will gladly honor your request to address

you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records.

Note: This syllabus is not a binding document and may be modified provided students are given reasonable notice of the changes.