

SYLLABUS - MATH 1070, Section 4, Fall 2018
Introduction to Statistical Inference

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Class Hours: TH 2:00 – 3:20 PM, JWB 335

Office Hours: TH 3:30 AM – 4:30 PM or by appointment.

Text: The Basic Practice of Statistics, by David S. Moore et al., 6th ed

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).

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	

Homework: Homework will be due at the beginning of class at the dates shown on the schedule below. Late homework **will not** be accepted, but two of the lowest assignment scores will be dropped at the end of the semester.

Quizzes: Weekly quizzes will be given in class on Thursdays. Makeup quizzes **will not** be given, but two of the lowest quiz scores will be dropped at the end of the semester.

Exams: Two in-class midterm exams and a final exam will be given (see schedule for dates). Rescheduling must be done one week in advance, no exceptions.

Projects: 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.

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>

Due Dates: These are also posted on Canvas with grades as you complete them.

Th, Aug 23	Quiz 0
Tue, Aug 28	HW 1 due: Ch. 1:22,27,30,31; Ch. 2: 19,22,25,28,30,44,52
Th, Aug 30	Quiz 1
Fri, Aug 31	Last day to add or drop classes
Mon, Sep 3	Labor Day holiday
Tue, Sep 4	HW 2 due: Ch. 3: 16,28,29,30,32,35,36
Th, Sep 6	Quiz 2
Tue, Sep 11	HW 3 due: Ch. 3: 45,47; Ch. 4: 16,17,18,19,20,21,26,34
Th, Sep 13	Quiz 3
Tue, Sep 18	HW 4 due: Ch. 5: 19,20,21,32,33,37
Th, Sep 20	Quiz 4
Tue, Sep 25	HW 5 due: Ch. 8: 17, 18, 20, 21, 24, 38; Ch. 9: 20, 21, 22, 25, 29, 36
Th, Sep 27	Quiz 5
Tue, Oct 2	HW 6 due: Ch. 10: 21, 24, 26, 38, 41, 43; Ch. 11: 14-20 (even), 26, 28, 36
Th, Oct 4	EXAM 1
Oct 7-14	FALL BREAK
Th, Oct 18	Quiz 6
Tue, Oct 23	HW 7 due: Ch. 14: 11, 12, 15, 16, 17, 18, 24, 26
Th, Oct 25	Quiz 7
Tue, Oct 30	HW 8 due: Ch. 15: 20, 21, 22, 23, 24, 30, 32, 41
Th, Nov 1	Quiz 8
Tue, Nov 6	HW 9 due: Ch. 18: 16, 19, 29, 30, 33
Th, Nov 8	Quiz 9
Tue, Nov 13	HW 10 due: Ch. 19: 16, 17, 25, 26, 32, 33; Ch. 20: 32, 34, 38
Th, Nov 15	EXAM 2
Tue, Nov 20	Quiz 10
Th, Nov 22	Thanksgiving break
Tue, Nov 27	HW 11 due: Ch. 23: 30, 32(b), 38, 42
Th, Nov 29	Quiz 11
Tue, Dec 4	HW 12 due: Ch. 25: 15, 16, 28, 30, 37, 39
Th, Dec 6	Project due; Last day of class
Mon, Dec 10, 2018 1:00 - 3:00 pm	FINAL EXAM