

SYLLABUS - MATH 1070, Section 4, Spring 2019
Introduction to Statistical Inference

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Class Hours: MW 8:05 – 9:25 AM, SW 133

Office Hours: MW 9:35 AM – 10:35 AM or by appointment.

Text: The Basic Practice of Statistics, by David S. Moore et al., 6th ed
https://www.amazon.com/gp/offer-listing/B00CUELASK/ref=tmm_pap_used_olp_sr?ie=UTF8&condition=used&qid=&sr=

Canvas Page: <https://utah.instructure.com/courses/542091>

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 end of class time 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 Wednesdays. 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 group project using spreadsheet software.

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>

Note on Absences: University-excused absences that are known ahead of time are those such as officially sanctioned University activities (e.g., band, debate, student government, intercollegiate athletics), or government obligations (e.g., military duty), or religious obligations. Students who have to miss classes or class work due to such absences are required to provide third party documentation to the instructor at the earliest. The instructor will make mutually agreed upon arrangements with the students under these circumstances. Outside of these categories, please come by and talk to the instructor only in the event of extenuating circumstances.

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

Wednesday, January 9	Quiz 0
Wednesday, January 16	Quiz 1 HW 1 due: Ch. 1:22, 27, 30, 31 Ch. 2: 19, 22, 25, 28, 30, 44, 52
Friday, January 18	Last day to add or drop classes
Wednesday, January 23	Quiz 2 HW 2 due: Ch. 3: 16,28,29,30,32,35,36
Wednesday, January 30	Quiz 3 HW 3 due: Ch. 3: 45,47 Ch. 4: 16,17,18,19,20,21,26,34
Wednesday, February 6	Quiz 4 HW 4 due: Ch. 5: 19,20,21,32,33,37
Wednesday, February 13	EXAM 1 8:05 – 9:25 AM, SW 133
Wednesday, February 20	Quiz 5 HW 5 due: Ch. 8: 17, 18, 20, 21, 24, 38; Ch. 9: 20, 21, 22, 25, 29, 36
Wednesday, February 27	Quiz 6 HW 6 due: Ch. 10: 21, 24, 26, 38, 41, 43; Ch. 11: 14-20 (even), 26, 28, 36
Wednesday, March 6	Quiz 7 HW 7 due: Ch. 14: 11, 12, 15, 16, 17, 18, 24, 26
March 8	Last Day to Withdraw from Classes
March 10-17	Spring Break
Wednesday, March 20	Quiz 8 HW 8 due: Ch. 15: 20, 21, 22, 23, 24, 30, 32, 41
Wednesday, March 27	Quiz 9 HW 9 due: Ch. 18: 16, 19, 29, 30, 33
Wednesday, April 3	EXAM 2 8:05 – 9:25 AM, SW 133
Wednesday, April 10	Quiz 10 HW 10 due: Ch. 19: 16, 17, 25, 26, 32, 33; Ch. 20: 32, 34, 38
Wednesday, April 17	Quiz 11 HW 11 due: Ch. 23: 30, 32(b), 38, 42
Monday, April 22	HW 12 due: Ch. 25: 15, 16, 28, 30, 37, 39 Project due; Last day of class
Tuesday, April 30	FINAL EXAM 8:00 – 10:00 AM, SW 133

Course Content Calendar: Notes are provided under the Canvas Home tab in the Notes folder. Please bring them to class to get the most out of the lectures.

January 7 and 9	Chapters 1 and 2
January 14 and 16	Chapter 3
January 18	Last day to add or drop classes
January 21 and 23	Martin Luther King Jr. Day Holiday, Chapter 3 continued and Chapter 4
January 28 and 30	Chapter 5
February 4 and 6	Chapters 8 and 9
February 11 and 13	Review and Exam 1
February 18 and 20	Presidents' Day, Chapter 10
February 25 and 27	Chapter 11 and 14
March 4 and 6	Chapter 15
March 8	Last Day to Withdraw from Classes
March 11 and 13	Spring Break
March 18 and 20	Chapter 18
March 25 and 27	Chapters 19 and 20
April 1 and 3	Review and Exam 2
April 8 and 10	Chapter 23
April 15 and 17	Chapter 25
April 22	Projects and Last Day of Class
Tuesday, April 30	FINAL EXAM 8:00 – 10:00 AM, SW 133