

**SYLLABUS - MATH 1070, Section 1, Fall 2018**  
Introduction to Statistical Inference

**Instructor:** Huy Dinh  
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**Class Hours:** MWF 8:35 – 9:25 PM, JTB 310

**Office Hours:** MW 9:30 AM – 10:30 PM or by appointment.

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

**Canvas Page:** <https://utah.instructure.com/courses/512433>

**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 Fridays. 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.

Friday, August 24	Quiz 0
Monday, August 27	HW 1 due: Ch. 1:22,27,30,31;Ch. 2: 19,22,25,28,30,44,52
Friday, August 31	Quiz 1; Last day to add or drop classes
Monday, September 3	Labor Day holiday
Wednesday, September 5	HW 2 due: Ch. 3: 16,28,29,30,32,35,36
Friday, September 7	Quiz 2
Monday, September 10	HW 3 due: Ch. 3: 45,47;Ch. 4: 16,17,18,19,20,21,26,34
Friday, September 14	Quiz 3
Monday, September 17	HW 4 due: Ch. 5: 19,20,21,32,33,37
Friday, September 21	Quiz 4
Monday, September 24	HW 5 due: Ch. 8: 17, 18, 20, 21, 24, 38; Ch. 9: 20, 21, 22, 25, 29, 36
Friday, September 28	Quiz 5
Monday, October 1	HW 6 due: Ch. 10: 21, 24, 26, 38, 41, 43; Ch. 11: 14-20 (even), 26, 28, 36
Friday, October 5	<b>EXAM 1</b> 8:35 – 9:25 PM, JTB 310
October 7-14	<b>Fall break</b>
Friday, October 19	Quiz 6
Monday, October 22	HW 7 due: Ch. 14: 11, 12, 15, 16, 17, 18, 24, 26
Friday, October 26	Quiz 7
Monday, October 29	HW 8 due: Ch. 15: 20, 21, 22, 23, 24, 30, 32, 41
Friday, November 2	Quiz 8
Monday, November 5	HW 9 due: Ch. 18: 16, 19, 29, 30, 33
Friday, November 9	Quiz 9
Monday, November 12	HW 10 due: Ch. 19: 16, 17, 25, 26, 32, 33; Ch. 20: 32, 34, 38
Friday, November 16	<b>EXAM 2</b> 8:35 – 9:25 PM, JTB 310
Wednesday, November 21	Quiz 10
November 22-25	<b>Thanksgiving break</b>
Monday, November 26	HW 11 due: Ch. 23: 30, 32(b), 38, 42
Friday, November 30	Quiz 11
Monday, December 3	HW 12 due: Ch. 25: 15, 16, 28, 30, 37, 39
Wednesday, December 5	Project due; Last day of class
Tuesday, December 11	<b>FINAL EXAM</b> 8:00 – 10:00 AM, JTB 310

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

August 20,22 and 24	Chapters 1 and 2
August 27, 29 and 31	Chapter 3
September 3, 5 and 7	Labor Day Holiday, Chapter 3 continued and Chapter 4
September 10,12 and 14	Chapter 5
September 17,19 and 21	Chapters 8 and 9
September 24,26 and 28	Chapter 10 and 11
October 1,3 and 5	Review and Exam 1
October 15,17 and 19	Chapter 14
October 22,24 and 26	Chapter 15
October 29 and 31 and November 2	Chapter 18
November 5, 7 and 9	Chapters 19 and 20
November 12, 14 and 16	Review and Exam 2
November 19 and 21	Chapter 23, Thanksgiving Holiday
November 26, 28 and 30	Chapter 25
December 3 and 5	Projects and last day of class
Tuesday, December 11	<b>FINAL EXAM</b> 8:00 – 10:00 AM, JTB 310