

SYLLABUS - MATH 1070, Section 2, Spring 2019

Introduction to Statistical Inference

Instructor: Aurora Jensen

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Class Hours: MW 6:00 PM– 7:30 PM, JWB 335

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

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 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 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.

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.

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.

Electronic Devices: In an effort to create a vibrant learning community, extraneous use of cell phones and other electronic devices is **not allowed**. Turn them off and put them away. Use of electronic devices distracts you, those around you, and me. If you are using a computer to take notes, it must lie flat on the desk. (No computers with open screens). If you need to use your phone during class, please leave the classroom. You will be asked to leave if your phone is visible.

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>

MATH 1070 Tentative Schedule (it may change during the semester)

Meeting	Day	Date	Quiz / Exam	Due	6th ed. Reading
1	M	1/7			Buy/Find textbook
2	W	1/9	Quiz 0		
	M	1/14	HW 1 Chapters 0 - 2		
3	W	1/16	Quiz 1		
	M	1/21	Martin Luther King Holiday		
4	W	1/23	Quiz 2	HW 2	Chapter 3
5	M	1/28		HW 3	Chapters 3, 4
6	W	1/30	Quiz 3		
7	M	2/4		HW 4	Chapter 5
8	W	2/6	Quiz 4		
9	M	2/11			
10	W	2/13	Quiz 5	HW 5	Chapters 8, 9
	M	2/18	Presidents' Day		
11	W	2/20	Mid-Term 1		
12	M	2/25		HW 6	Chapters 10, 11
13	W	2/27	Quiz 6		
14	M	3/4		HW 7	Chapter 14
15	W	3/6	Quiz 7		
	M	3/11	SPRING BREAK		
	W	3/13			
16	M	3/18		HW 8	Chapter 15
17	W	3/20	Quiz 8		Project assigned
18	M	3/25		HW 9	Chapter 18
19	W	3/27	Quiz 9		
20	M	4/1		HW 10	Chapters 19, 20
21	W	4/3	Mid-Term 2		
22	M	4/8			
23	W	4/10	Quiz 10	HW 11	Chapter 23 Project due
24	M	4/15			
25	W	4/17	Quiz 11	HW 12	Chapter 25
26	M	4/22	Review Final Exam		
27	M	4/29	Final Exam (6 - 8 pm)		

Homework sets:

HW 1 due: Ch.1:22,27,30,31; Ch. 2: 19,22,25,28,30,44,52
HW 2 due: Ch. 3: 16,28,29,30,32,35,36
HW 3 due: Ch. 3: 45,47; Ch. 4: 16,17,18,19,20,21,26,34
HW 4 due: Ch. 5: 19,20,21,32,33,37
HW 5 due: Ch. 8: 17, 18, 20, 21, 24, 38; Ch. 9: 20, 21, 22, 25, 29, 36
HW 6 due: Ch. 10: 21, 24, 26, 38, 41, 43; Ch. 11: 14-20 (even), 26, 28, 36
HW 7 due: Ch. 14: 11, 12, 15, 16, 17, 18, 24, 26
HW 8 due: Ch. 15: 20, 21, 22, 23, 24, 30, 32, 41
HW 9 due: Ch. 18: 16, 19, 29, 30, 33
HW 10 due: Ch. 19: 16, 17, 25, 26, 32, 33; Ch. 20: 32, 34, 38
HW 11 due: Ch. 23: 30, 32(b), 38, 42
HW 12 due: Ch. 25: 15, 16, 28, 30, 37, 39

Important academic dates:

Mon 1/7 First Day of Class
Fri 1/18 Last Day to Add/Drop
Fri 1/18 Last Day to Elect CR/NC or Audit
Mon 1/21 Martin Luther King Jr. Day Holiday Mon 2/18 Presidents' Day Holiday
Fri 3/8 Last Day to Withdraw
Sun-Sun Mar 10-17 Spring Break
Fri 4/19 Last Day to Reverse CR/NC option
Tues 4/23 Last Day of Class

