MATH 1070-070 Spring 2019 Intro Stat Inference

INSTRUCTOR - Tom Brennan

EMAIL - tombrennan@waterfordschool.org (THIS IS THE BEST WAY TO REACH ME!)

CELL - 801-580-9985. You can text me, but remember to tell me your name if you do so.

TEXTBOOK - *The Basic Practice of Statistics*, 6th or 7th ed by David Moore.

TECHNOLOGY - We will be using spreadsheets to aid us with the computations that we have to make. I will be demonstrating with Google Sheets. No fancy calculators are needed for class, however you will want a basic scientific calculator. NO cell phone calculators are allowed on quizzes or exams.

CELL PHONES - The latest research indicates that students that focus on their phones in class instead of listening and working tend to have lower grades in class than those that do. Surprising? Put them away. Pay attention (after all you paid an enormous sum to be here). Talk to the people around you when we take a break.

HELP RESOURCES-

1. Teacher
2. Math Help Center - located in TBR Math Center (this is on President's Circle between JWB and LCB.
3. The Tutoring Center - located in SSB
4. Internet (e.g. Khan Academy)
5. Each other

ADA - 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.

OFFICE HOURS - I will arrive in the classroom about 15 minutes prior to the beginning of class. You are welcome to come early and ask questions, stay late and ask questions, or make an appointment with me to meet at another time.

HOMEWORK - You are required to turn in a hard copy consisting of 10 problems most days that we have class. These problem sets can be typed or written up. Make sure that your work is neat and organized. Sloppy work will not be accepted. The homework assignments will count for 10% of your final grade. You can choose any 10 problems that you want from the book but I suggest the problems listed under homework. **All supporting work needs to be included (even for the multiple choice questions)**. Of course, you should do all of the assigned work as preparation for the in-class quizzes.

- **Make sure that you include your name, date, assignment number and all of the work supporting your solutions.**
- **You need to use complete sentences when writing.**
- **Staple your papers together if you have more than one page.**

QUIZZES - We will have a quiz in-class most weeks in the middle or at the end of class on Wednesday. Some will be collaborative and others will not. You are allowed to use a 3 inch by 5 inch card for each quiz. A few of these in the official quiz category will be take-home because the data sets will be large enough that you will want to use software as a computational aid. You get to drop your two lowest quiz scores. **NO make-up quizzes allowed.** These quizzes will make up 15% of your grade.

EXAMS - There are two midterm exams and a comprehensive final exam. You are allowed to use one page of notes for the first midterm and two pages of notes for the final. The second midterm
is a take-home exam. The dates are set so make sure that you are there. If an emergency arises, we can schedule an alternate exam.

GRADES - Your grades will be determined by a combination of exams and quizzes. The final exam is required.

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<thead>
<tr>
<th>Score Range</th>
<th>Grade</th>
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<tbody>
<tr>
<td>93 - 100</td>
<td>A</td>
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<td>90 - 92.99</td>
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<td>88 - 89.99</td>
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<td>55 - 64.99</td>
<td>D's</td>
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LEARNING OUTCOMES -

- 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.
- Be able to perform simple statistical analysis of large data sets using spreadsheets (throughout the whole course).