STAT 2507

Lab 2

Contact Information

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Section E3: Wednesdays 7:35-8:25

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A note about email: The TAs are not given hours for office hours or emails for this course. Please contact by email for issues related to the labs only (other emails will be forwarded to the Professor)

Resources for the course

- For questions related to what we do in the labs: email me
- For questions related to grading: email the Professor
- For questions related to the course in general: use the Discussion Forum on cuLearn or email the Professor

For help with course content (such as going through practice problems, old assignment questions, textbook questions etc), please use the Math Tutorial Centre or the MS-LAP (Mathematics and Statistics Learning Assistance Program)

Math Tutorial Centre (MTC)

- FREE Online help from TAs, available Monday-Friday 10am-9pm
- Search on Google for “Carleton Math Tutorial Centre” for the schedule
- Look for anyone whose name has a “P” or “S” beside it (Probability &
- Statistics)

MS-LAP

- Videos solving practice problems for this course
- https://carleton.ca/math/math-learning-assistance-program/
- Available through cuLearn
- You can also use it to ask questions

Thanks for filling out the form last week

I will put the link in the chat at the end again for anyone who didn’t get a chance to fill it out already

https://forms.gle/auih2D7vs6nVjKPE7

Today’s Lab

- Briefly: 3 common mistakes from Assignment 1
- Using SPSS to simulate 1000 coin flips
- Mid-semester feedback: “Start, Stop, Continue”

Types of Variables

A variable can either be qualitative, or quantitative.

- If a variable is quantitative, it can be further classified as either continuous or discrete.
- A qualitative variable cannot be discrete or continuous -- these words only apply to quantitative variables!

It’s about more than just the numbers

Most of the time, when students lose marks in this class, it won’t be for getting incorrect numeric answers...

Make sure you follow what you learned in THIS course!

As a general statement:

- Use the formulae learned in this class, do not consult the Internet or you risk losing marks
  - If your notation is different, or if you have a slightly different version of the formula, you most likely will lose marks. Don’t risk it, use your course notes / lecture videos.
- Use the instructions from the tutorials to guide you for the SPSS portions of the assignments

Always interpret your answers, always

- Seriously, always
- There will always be marks for interpreting your numeric answers, getting the final answer is not enough (even if the question doesn’t explicitly say interpret)
- Better to give more information and ensure you get full marks than to chance it by omitting some information

Review: Bernoulli Random Variables

- A Bernoulli Random Variable represents a “trial” that has two outcomes: a success or a failure
  - Probability of success: p
  - Probability of failure: $1 - p$
- Example 1: If you flip a coin and define a tail as a “success”,
  - $p = 0.5$
  - $1 - p = 1 - 0.5 = 0.5$
- Example 2: If you roll a die and define a 1 or 4 as a “success”,
  - $p = 1/3 = 0.3333$
  - $1 - p = 1 - 1/3 = 2/3 = 0.6666$
- Today, we will flip 1000 coins and see how many times we get a tail.

Stop, Start, Continue

- We are now halfway through the tutorials for this course
- Please use this link to tell me:
  - What's 1 thing I should **STOP** doing during tutorials?
  - What's 1 thing I should **START** doing during tutorials?
  - What's 1 thing I should **CONTINUE** doing during tutorials?
- https://forms.gle/YhW2zCuJHVNfsr6X7