# STAT 2507

Lab 04

October 8th, 2019

# Contact Information

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Labs:

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|---|---|
| Section C1 (Alia Alkhathami): | Tuesdays 2:35-3:25, HP 4385 |
| Section B6 (Tanvir Quadir): | Tuesdays 3:35-4:25, HP 4385 |

Office Hours:

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|---|---|
| Section C1 (Alia Alkhathami): | Tuesdays / Thursdays 12-1, HP 4260 |
| Section B6 (Tanvir Quadir): | Wednesdays 6-7, HP 4220 |

# Math Tutorial Centre

- The math tutorial centre (MTC) opens on Friday, September 20th, and runs until Friday, December 6th
- Google “Carleton Math Tutorial Centre” to see full schedule (look for “P” and “S”)
- Mondays: 11-12:30 and 1-3
- Tuesdays: 10-3
- Wednesdays: 10-12:30 and 1-3
- Thursdays: 10-4
- Fridays: 11-3

# Questions, Comments, Concerns

- If at any point during the semester you have any comments regarding the labs specifically, please feel free to use the following (anonymous, unless you choose to include your name):

https://forms.gle/YGvrNr7ePeVv8YR19

I will get an email to my phone whenever a response is submitted – feedback will be seen and taken into consideration promptly

- Examples of helpful feedback:
  - *Moving too quickly or too slowly*
  - *Talking too quickly or too slowly*
  - *Talking too quietly or too loudly*
  - *Font is too small or too big*

# Assignment 1: Comments

- Overall, very well done!
- Unit: **one** member of the set of all entities being studied
- Population: the set of **all** entities being studied

7. (18 points) The following is the number of passengers per flight in a sample of 34 flights from Ottawa, Ontario, to Hampton, Washington in 2018.

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 78 | 73 | 75 | 99 | 50 | 58 | 25 | 56 | 57 | 55 | 59 | 55 | 62 | 69 | 77 | 66 | 51 |
| 21 | 53 | 30 | 51 | 63 | 52 | 57 | 68 | 75 | 66 | 65 | 69 | 79 | 72 | 65 | 53 | 50 |

(a) (2 points) What is the population under consideration here? What is the used measurement unit?

**Solution:**
The **population** is all flights from from Ottawa, Ontario, to Hampton, Washington in 2018.
The **unit** is a particular flight from from Ottawa, Ontario, to Hampton, Washington in 2018.

# Today’s Lab

- Question 2 & 3 on assignment 2
- Time to work on remainder of assignment individually, feel free to ask questions

# Discrete vs. Continuous Random Variables

- Discrete: can only take on a countable (or countably infinite) number of possible distinct values
- Continuous: can take on an infinite number of possible distinct values
- Recall: Binomial and Hypergeometric are discrete distributions