STAT 2060 / MATH 2060
Introduction to Probability and Statistics
2019/2020 Winter

Instructor:	Dr. Lam Ho
Time:	TRF 04:35 pm - 05:25 pm (Jan 06, 2020 - Apr 03, 2020)
	M 04:35 pm - 05:25 pm (Apr 06, 2020)
Location:	Studley SIR JAMES DUNN 117
Office hours:	12:00 pm - 1:00 pm TRF
Office:	CHASE building 301
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Course Description: Rigorous introduction to probability and statistical theory. Topics covered include elementary probability, random variables, distributions, estimation and hypothesis testing.

Course Prerequisites: MATH 1000.

Course Objectives/Learning Outcomes:

- Understand random variables and probability distributions.
- Know how to do point estimation, construct confidence intervals, and perform hypothesis tests.

Course Materials:

- **Textbook:** Probability and Statistics for Engineering and the Sciences, 9th edition, by J. Devore.
- **Lectures:** course slides will be posted on Brightspace.
- **Homework:** online assignments.
- **Course Websites:** Brightspace (course materials) and LON-CAPA (homework).

How to Login to LON-CAPA:

- In your web browser, go to `http://capa.mathstat.dal.ca`.
- You will be prompted to enter a username and password. By default, your username is your Dalhousie NetID and your password is your banner number (your Dalhousie student number that starts with B00). Your full banner number must be entered, that is: the upper-case letter B, followed by two zeros, then followed by 6 digits.
- You then have to select a role for the course you wish to enter. Most likely, you will have only one choice: a student user role for the course titled "Stat 2060". Click on the Select button next to that choice.
- You will be directed to the home page of the course. Navigation is easiest by using the tabs in the top blue bar. The Contents tab is where the assignments will be posted.
- For increased security and convenience, you should change the default password. Click on the "Main Menu" tab in the top blue bar, then click on "Set my user preferences" and then click on "Password". Enter the current (default) password and enter (twice) your new password.

Course Tutorials:

- Leaders: Chaoyue Liu and Vishal Sood.
- Time: Jan 20, 2020 - Apr 06, 2020.

Course Assessment: There are homework assignments, tutorial quizzes, 1 midterm exam and 1 final exam. The exams are closed-book but the students are allowed to bring **2 double-sided** pages of notes. The schedules for the exams:

- Midterm: February 14th, 2020 (Friday) 04:35 pm - 05:25 pm – Studley SIR JAMES DUNN 117
- Final: TBA

Your numerical grade is computed as follows:

Component	Weight (% of final grade)
Assignments	20%
Tutorial quizzes	10%
Midterm	30%
Final	40%

However, if you **do better in the final than the midterm**, your numerical grade is computed as follows:

Component	Weight (% of final grade)
Assignments	20%
Tutorial quizzes	10%
Final	70%

Conversion of numerical grades to Final Letter Grades follows the <u>Dalhousie Common Grade Scale</u>

A+	(90-100)	**B+**	(77-79)	**C+**	(65-69)	**D**	(50-54)
A	(85-89)	**B**	(73-76)	**C**	(60-64)	**F**	($<$50)
A-	(80-84)	**B-**	(70-72)	**C-**	(55-59)		

Course Policies:

- No late assignments will be accepted.
- Make-up exams can only be arranged in exceptional circumstances such as illness (with medical certificate). In such circumstances, the student must inform the instructor as soon as possible and provide proof.
- The students are responsible for making aware of any announcement regarding the course during class.

Course Content: chapters 2 - 9 of the textbook. Specifically,

Chapter	Topic
2	Probability
3	Discrete random variables
4	Continuous random variables
5	Joint probability distributions
6	Point estimation
7	Confidence intervals
8	Hypothesis tests based on a single sample
9	Inference based on two samples

Learning Center: For help with course content, please visit the Math/Stat Learning Center - Chase Building, main floor.