

**Course Handout - Detailed syllabus**  
**Introductory Statistics for Science and Health Sciences**  
**STAT 1060/MATH 1060 - Fall 2019**

Instructors	Office	Email	Office hours
Dr. Ammar Sarhan(Coordinator)	Chase 105	ammarsarhan@dal.ca	TWF 10:30-11:25
Mr. Jing Zhang	Chase 353	jingzhang@dal.ca	MW 14:30-16:00

Notes	CRN	Section	Cr Hrs	Link	Days					Times	Location(s)
					Mo	Tu	We	Th	Fr		
<b>STAT 1060 Intro/Stat/Scie &amp; Hlth Science ▶</b>											
Course equivalent with <b>MATH 1060</b>											
R	12737	01 Lec	3		M	W				F 1335-1425 F 1435-1525	Studley MCCAIN ARTS&SS AUD-1 Studley KENNETH C ROWE MANAG 1028
R	12738	02 Lec	3		M	W			F	1135-1225	Studley MCCAIN ARTS&SS AUD-1
	12739	T01 Tut	0	L0					F	1335-1425	Studley SIR JAMES DUNN 301A
	12740	T02 Tut	0	L0					F	1135-1225	Studley MCCAIN ARTS&SS 2019
	12741	T03 Tut	0	L0					F	1135-1225	Studley SIR JAMES DUNN 301A
	12742	T04 Tut	0	L0					F	1235-1325	Studley SIR JAMES DUNN 301A
	12743	T05 Tut	0	L0			W			1435-1525	Studley MCCAIN ARTS&SS 2019
	12744	T06 Tut	0	L0			W			1535-1625	Studley MCCAIN ARTS&SS 2019
	12745	T07 Tut	0	L0	M					1805-1855	Studley MCCAIN ARTS&SS 2019
	12746	T08 Tut	0	L0	M					1035-1125	Studley MCCAIN ARTS&SS 2019
	12747	T09 Tut	0	L0	M					1335-1425	Studley MCCAIN ARTS&SS 2019
	12748	T10 Tut	0	L0	M					1135-1225	Studley MCCAIN ARTS&SS 2019

Marking Scheme	Marking Scheme	
	Total grade	Letter grade
Tutorial	15%	90 to 100 A+
Assignments	15%	85 to 89 A
Exam 1	35%	80 to 84 A-
Exam 2	35%	77 to 79 B+
		73 to 76 B
		70 to 72 B-
		65 to 69 C+
		60 to 64 C
		55 to 59 C-
		50 to 54 D
		<50 F

## Textbook and Course Materials

- The course text is **STATS: Data and Models, Third Canadian Ed.** by Richard D. De Veaux *et. al.*
- You will also need a scientific calculator with natural log and exponential functions.
- MINITAB 18 for Windows is available for installation on your own computer (it is not provided for Mac) as a free download at <http://software.library.dal.ca/>
- R software with RStudio. You can download both R and RStudio for free from the following links:

For R: <https://mirror.its.sfu.ca/mirror/CRAN/>

For RStudio: <https://www.rstudio.com/products/rstudio/download/#download>

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## Course Description

This course gives an introduction to the basic concepts of statistics through extensive use of examples. The topics include descriptive statistics, simple linear regression and the basics of statistical inference. Students will learn to use at least one of the statistical softwares (MINITAB, R, Excel).

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## Exams

- **Exam 1:**
  - Time: **Friday, October 18, 7:30 PM to 9:30 PM**
  - Where: **TBA**
  - Topics: Material covered in class up to and including Chapter 13 and taught by Dr. Sarhan.
- **Exam 2:**
  - Time and Where: **TBA**
  - Topics: Material covered in class that was not on Exam 1 (Exam 2 is not cumulative). That is, exam 2 covers only topics that are taught by Mr. Zhang.

### Note:

- For both two exams, we will provide formula sheet and required statistical tables.
- You should bring a scientific calculator (Cell phones cannot be used during the exams).
- Both two exams are final exams and exams papers will **NOT** be returned to students.

**Makeup Exams Policy:** Makeup exam will be guaranteed to those who have conflict with another class or sick. For sick students, a doctor (NOT nurse) sick note MUST be submitted to Dr. Sarhan.

## Tutorials

There are 9 weekly tutorials begin on Tuesday, starting September 16. Each student is expected to be registered for and attend weekly tutorial sessions.

- **Tutorial Assessments:** There are 9 weekly tutorials and associated assessments. The table below shows the tutorial schedule.
- All tutorial assessments can be completed online at the course LON-CAPA website.
- Within the time frame for each tutorial assessment, students may open and close the assessment as often as they like.
- **NetID:** Your NetID is needed to logon to computers in Mmass 2019 for tutorials. To claim your NETID go to the website <http://wa.its.dal.ca/newuser/> and follow directions given there.

**Tutorial Assessments' Schedule**

Week	Assignment	Open-Close Dates	Week	Assignment	Open-Close Dates
3	1	Sept 16 - 20	8	6	Oct 21 - 25
4	2	Sept 23 - 27	9	7	Oct 28 - Nov 1
5	3	Sept 30 - 4	10	8	Nov 4 - 8
6	4	Oct 7 - 11	11	–	Study Break
7	5	Oct 14 - 18*	12	9	Nov 18 - 22

**NOTE:** Tutorial assessments are due Fridays at 23:59.

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## Assignments

- There are 9 weekly assignments to be completed online at the course LON-CAPA website.
- Each assignment has a specific opening and closing time which is shown on the website and in the table below. You may only access an assignment between its opening and closing times and all answers must be entered into LON-CAPA, and saved, during that time frame. Unsaved answers are not read by LON-CAPA.
- Within the time frame for each assignment (Monday 9:00 am to Sunday midnight), students may open and close an assignment as often as they like. Remember to save your answers.
- Assignments will be marked electronically by LON-CAPA after their closing date/time has arrived. Answers are posted after the assignment closes.
- Assignments, tutorial assessments and tutorial quiz are to be done independently. If we suspect any students of copying assignments from another student, we are required to report the incident to the Senate Discipline Committee.

### Assignments Schedule

Week	Assignment	Open-Close Dates	Week	Assignment	Open-Close Dates
3	1	Sept 16 - 22	8	6	Oct 21 - 27
4	2	Sept 23 - 29	9	7	Oct 28 - Nov 3
5	3	Sept 30 - 6	10	8	Nov 4 - 11
6	4	Oct 7 - 13	11	–	Study Break
7	5	Oct 14 - 20*	12&13	9	Nov 18 - Dec 3

**NOTE:** Assignments are due Sundays at 23:59.

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### How to Login to LON-CAPA

1. Will be available before September 16. If you cannot login onto CAPA by September 15, you **MUST** contact the capa TA (chaoyue.liu@dal.ca).
  2. In your web browser, go to <http://capa.mathstat.dal.ca>.
  3. 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, i.e., the upper-case letter B, followed by two zeros and then 6 digits.
  4. 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 1060". Click on the Select button next to that choice.
  5. 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.
  6. 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.
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### Statistics 1060 Brightspace Website

- All course material, such as the syllabus, lecture notes, tutorials etc, will be posted on Brightspace and other class information <https://dal.brightspace.com/>
- You will be prompted for your user id and password. Your user id is your NetID user name and your initial password is your student number starting with a capital B as explained above.
- Note that once you have logged in you will have access to the Brightspace pages for any class in which you're registered. There is a delay of 24 hours from the time you register until the Brightspace lists are updated.
- If you have any problems, please contact the Help Desk (Phone 902-494-2376 or 1-800-869-3931, or email [helpdesk@dal.ca](mailto:helpdesk@dal.ca))

## MINITAB Software

- MINITAB release 18 is the software used in the tutorials and for some of the assignments.
- Available on machines in campus computer labs and Learning Commons(Killam, Kellog, Sexton).
- As mentioned above, MINITAB 18 is also available for installation on your own computer as a free download at: <http://software.library.dal.ca/>

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## Getting Extra Help

- Should you require help, visit the **Math/Stats Resource Centre** located in Chase 119.
- Stats tutors will be available in the Math/Stats Resource Centre.

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## Classroom Etiquette

- Cell phones and other texting devices **should be turned OFF** before class begins.
- If you must, on rare occasions, leave class early; please take a seat near the door so that your exit will not disrupt the class unduly. Similarly, try to arrive at class on time, but enter quietly when you cannot.
- Refrain from unnecessary talking when the instructor or a student is speaking to the class.
- Treat your instructor and your fellow students with the courtesy with which you would like to be treated!

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## Student Accessibility Services (SAS)

- Students may request accommodation as a result of barriers related to disability, religious obligation, or any characteristic under the Nova Scotia Human Rights Act.
- Students who require academic accommodation for either classroom participation or the writing of tests, quizzes and exams should make their request to the Office of Student Accessibility & Accommodation (OSAA) prior to or at the outset of each academic term (with the exception of X/Y courses).
- Please see [www.studentaccessibility.dal.ca](http://www.studentaccessibility.dal.ca) for more information and to obtain Form A - Request for Accommodation.
- A note taker may be required to assist a classmate. There is an honorarium of \$75/course/term. If you are interested, please contact OSAA at 494-2836 for more information.
- Please note that your classroom may contain specialized accessible furniture and equipment. It is important that these items remain in the classroom so that students who require their usage will be able to participate in the class.

## Course Outline

Week	Date	Topic	Text			Instructor	
			Part	Chapter (ED)			
				1st	2nd		3rd
1	Sept 3-6	Displaying and Summarizing Quantitative Data	1	4	3	3	Dr. Sarhan
2	Sept 9-13	Understanding and Comparing Distributions	1	5	4	4	Dr. Sarhan
3	Sept 16-20	The standard deviation as a ruler	1	6	5	5	Dr. Sarhan
4	Sept 23 - 27	Sample Surveys	3	12	10	9	Dr. Sarhan
		Experiments and Observational Studies	3	13	11	10	Dr. Sarhan
5	Sept 30 - Oct 4	From Randomness to Probability	4	14	12	11	Dr. Sarhan
		Probability Rules	4	15	13	12	
6	Oct 7 -11	Random Variables	4	16	14	13	Dr. Sarhan
		Probability Model (Normal and Binomial)	4	17	14	13	Dr. Sarhan
7	Oct 14	Thanksgiving Day – University Closed					
7	Oct 16-18	Sampling Distribution Models	5	18	15	14	Mr. Zhang
		Confidence Intervals for Proportions	5	19	16	15	Mr. Zhang
7	Oct 18	Exam 1 from 7:30 - 9:30 pm					
8	Oct 21-25	Testing Hypotheses About Proportions	5	20	17	16	Mr. Zhang
9	Oct 28- Nov 1	More About Test	5	21	18	17	Mr. Zhang
		Inferences About Means	6	23	20	18	Mr. Zhang
10	Nov 4-8	Comparing Means	6	24	21	19	Mr. Zhang
		Paired Samples	6	25	22	20	Mr. Zhang
11	Nov 11-15	Study Break					
12	Nov 18-22	Scatterplots, Association, and Correlation	2	7	6	6	Mr. Zhang
13	Nov 25-	Linear Regression	2	8	7	7	Mr. Zhang
&	Dec 3	Regression Wisdom	2	9	8	8	Mr. Zhang
14		Inferences for Regression	7	27	24	23	Mr. Zhang
	Dec 5-15	<b>Final Exam Period</b>					