

STAT 251 - Elementary Statistics

Winter Term 1 (September to December 2018)

Course Description: Probability, discrete and continuous random variables, probability distributions, estimation, hypothesis testing, analysis of variance, regression.

Prerequisites: One of MATH 101, 103, 105, 121, SCIE 001.

Instructor: W. A. Lasantha Premarathna (Email: wpremara@stat.ubc.ca)

Class Room: ESB 1013 (Monday, Wednesday and Friday | **class time:** 8:00am-9:00am)

Office Hours: 9:00am - 10:00am on Wednesday (Location: ESB 1043),
or by appointment
(you also can meet me just after the classes on Monday and Friday)

Teaching assistants: To be announced, Please check the Course Website.

Course Website: canvas.ubc.ca

Please check the **Canvas** website regularly to keep up-to-date with the course.
Find our class page at: <https://canvas.ubc.ca/courses/5769>

Textbook: Course notes (free, download from Canvas)
Additional references: Any recent editions “Probability and Statistics for Engineering and the Sciences” (by J.L. Devore)

Canvas Discussions:

We will be using Canvas 'Discussions' for class discussion. The system is highly catered to getting you help fast and efficiently from classmates, the TAs, and perhaps myself. Rather than emailing questions to the teaching staff, I encourage you to post your questions (relates to class notes, examples, WeBWork questions, etc..) on Canvas Discussions.

If you have any problems related to technical issues, please use **?Help** (see the left side menu in the Canvas course page) to report the problem or to contact IT service.

Clickers: We will be using the i>Clicker in lectures. i>Clicker is a response system that allows you to respond to questions posed by instructors during class, and you will be graded on your participation and performance. You are required to purchase an i>Clicker remote for in-class participation. You must register your clicker **on Canvas** course page by Tuesday September 11, 2018.

WeBWork: I will let you know when it is available to you all (during the first week of classes). I will announce in the class (may post canvas announcements) when WeBWorks assignments are posted.

Access WeBWork: You need to access WeBWork through Canvas page. **Please go to <https://canvas.ubc.ca/courses/5769/assignments> and scroll to the bottom to find the WeBWork links.** Make sure you access WeBWork Assignments by clicking corresponding links. You need to access each WeBWork assignment through the Canvas page to sync your WeBWork grade to the canvas grade page.

Labs: Labs start the second week of class. You will have registered for a lab when you enrolled in the course, and only under exceptional circumstances should you switch from this session to another.

Course Assessment:

Assessment	Date	Percentage
Class participation and performance via i>clicker	in-class	6%
WeBWork Online homework (x10)	See the schedule for due dates	10%
Labs (x8)	Weekly	8%
Written Assignments (x2)	Due: Wednesday, October 17	3%
	Due: Friday, November 23	3%
Midterm	Wednesday, October 24	20%
Final Exam (you must pass the final to pass the course)	To be scheduled by Classroom Services. Exam schedule is released about 3 weeks before exams Exam period: December 4 -19	50%

Policy regarding missing the midterm or final exam:

1. There will be no make-up exam
2. Students who miss an exam should notify the instructor prior to (if possible) or immediately after the exam. Students must supply a supporting document (for example, a doctor's note will be sufficient in case of a medical emergency) within one week of the day of exam.

Examination Aids:

The following examination aids will be permitted for midterm and final examinations: calculators, statistical tables and a single letter-sized (8.5x11) aid sheet. The calculator must be a basic scientific model; calculators with graphics, programming or text storage capabilities are not allowed. Statistical tables will be provided to you on the day of the midterms or exam. Bring your student ID to midterms and the final exam.

It is important to note that the letter-sized (8.5x11) aid sheet has to be **handwritten** (no printed material, no photocopies allowed). You may write any notes and formulas that you feel are useful.

Midterm Exam aid sheet: You are allowed to use one side of a letter-sized (8.5x11) paper

Final Exam aid sheet: You may use both sides of a letter-sized (8.5x11) paper

Chapters to be covered: 1, 3 - 8, 10, 2 & 11

Detailed learning outcomes can be found on the course website. Refer to this document throughout the course to clarify the outcomes you are expected to attain for each section of the material.

Brief Course Description

- Descriptive Statistics (Ch. 1)
- Probability and probability models (Ch. 3)
- Random variables and distributions (Ch. 4-6)
- Central Limit Theorem (Ch. 7)
- Statistical estimation and hypothesis testing (Ch. 8)
- Analysis of variance (Ch. 10)
- Selected topics from regression (Ch. 2 & 11)

Reach Out for Success

University students often encounter setbacks from time to time that can impact academic performance. Discuss your situation with your instructor or an academic advisor. Learn about how you can plan for success at: www.students.ubc.ca

For help addressing mental or physical health concerns, including seeing a UBC counsellor or doctor, visit: <https://students.ubc.ca/health-wellness>

Schedule

This is a tentative lecture schedule and may be subject to change.

Any updates will be announced in class and/or posted on Canvas page.

Week	Dates	Lectures	WeBWork	Labs
1	Sep 4 - Sep 7	Ch 1	No WW	No Labs
2	Sep 10 - Sep 14	Ch 3	WW 1	Lab 0
3	Sep 17 - Sep 21	Ch 3, 4	WW 2	Lab 1
4	Sep 24 - Sep 28	Ch 4, 5	WW 3	Lab 2
5	Oct 1 - Oct 5	Ch 5, 6	WW 4	Lab 3
6	Oct 8 - Oct 12 <small>Oct 8 - University closed</small>	Ch 6	WW 5	No Labs
7	Oct 15 - Oct 19	Ch 6	WW 6 <small>Written Assignment 1 due</small>	Lab 4
8	Oct 22 - Oct 26	Ch 7 Midterm Wed, Oct 24	NO WW	No Labs
9	Oct 29 - Nov 2	Ch 7, 8	WW 7	Lab 5
10	Nov 5 - Nov 9	Ch 8	WW 8	Lab 6
11	Nov 12 - Nov 16 <small>Nov 12 - University closed</small>	Ch 8, 10	WW 8	No Labs
12	Nov 19 - Nov 23	Ch 10,2,11	WW 9 <small>Written Assignment 2 due</small>	Lab 7
13	Nov 26 - Nov 30	Ch 11	WW 10	Lab 8

***Office hours the week before and the week of the midterm may change. Please check Canvas for specific office hour times and locations during those times.**