



COURSE TIMES + LOCATION:

Mo, We, Fr 9:30 AM – 10:20 AM
REMOTE LEARNING, Burnaby

EXAM TIMES + LOCATION:

Oct 14, 2021
6:00 PM – 8:00 PM
REMOTE LEARNING, Burnaby

Nov 18, 2021
6:00 PM – 8:00 PM
REMOTE LEARNING, Burnaby

Dec 13, 2021
7:00 PM – 10:00 PM
REMOTE LEARNING, Burnaby

INSTRUCTOR:

Rachel Altman
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PREREQUISITES:

or Corequisite: MATH 152 or 155 or 158, with a minimum grade of C-. Students wishing an intuitive appreciation of a broad range of statistical strategies may wish to take STAT 100 first.

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CALENDAR DESCRIPTION:

Basic laws of probability, sample distributions. Introduction to statistical inference and applications. Quantitative.

COURSE DETAILS:

STAT Workshop Coordinator: Marie Loughin

Outline:

1. Introduction to graphical and numerical descriptive statistics including the histogram, boxplot, scatterplot, sample mean, sample median, sample standard deviation, sample coefficient of relative variation, and sample correlation coefficient.
2. Elementary probability rules, basic combinatorial formulae, conditional probability, Bayes' Theorem, and independence.
3. Introduction to discrete distributions including the probability mass functions, expectation, the binomial distribution, and the Poisson distribution.
4. Introduction to continuous distributions including the probability density function, expectation, variance, coefficient of variation, the cumulative distribution function, uniform distribution, gamma distribution, exponential distribution, normal distribution, normal approximation to the binomial distribution, jointly distributed random variables, statistics and their distributions, the Central Limit Theorem.
5. Single sample inference including estimation and testing of proportions and means.
6. Two sample inference including estimation and testing of differences in proportions and differences in means (paired and non-paired data).

Mode of teaching:

Required Textbook:

Choice of one of the following two books:

(Recommended*) **Probability and Statistics for Engineering and the Sciences, 9th ed.** by Jay L. Devore. Publisher: Cengage Learning

Probability and Statistics by Tim Swartz. Publisher: Pearson.

*This book is available online for a modest charge at vitalsource.com. It is especially recommended for students who plan to take that STAT 285 after completing STAT 270 (it is the required textbook for STAT 285). It is also recommended for students who would like a comprehensive textbook for STAT 270.

ISBN: 978-1-269-73721-0

DEPARTMENT UNDERGRADUATE NOTES:

Students with Disabilities:

Students requiring accommodations as a result of disability must contact the Centre for Accessible Learning 778-782-3112 or csdo@sfu.ca

Tutor Requests:

Students looking for a tutor should visit <https://www.sfu.ca/stat-actsci/all-students/other-resources/tutoring.html>. We accept no responsibility for the consequences of any actions taken related to tutors.

REGISTRAR NOTES:

ACADEMIC INTEGRITY: YOUR WORK, YOUR SUCCESS

SFU's Academic Integrity web site <http://www.sfu.ca/students/academicintegrity.html> is filled with information on what is meant by academic dishonesty, where you can find resources to help with your studies and the consequences of cheating. Check out the site for more information and videos that help explain the issues in plain English.

Each student is responsible for his or her conduct as it affects the University community. Academic dishonesty, in whatever form, is ultimately destructive of the values of the University. Furthermore, it is unfair and discouraging to the majority of students who pursue their studies honestly. Scholarly integrity is required of all members of the University. <http://www.sfu.ca/policies/gazette/student/s10-01.html>

TEACHING AT SFU IN FALL 2021

Teaching at SFU in fall 2021 will involve primarily in-person instruction, with approximately 70 to 80 per cent of classes in person/on campus, with safety plans in place. Whether your course will be in-person or through remote methods will be clearly identified in the schedule of classes. You will also know at enrollment whether remote course components will be "live" (synchronous) or at your own pace (asynchronous).

Enrolling in a course acknowledges that you are able to attend in whatever format is required. You should not enroll in a course that is in-person if you are not able to return to campus, and should be aware that remote study may entail different modes of learning interaction with your instructor, and ways of getting feedback on your work than may be the case for in-person classes.

Students with hidden or visible disabilities who may need class or exam accommodations, including in the context of remote learning are advised to register with the [SFU Centre for Accessible Learning](http://www.sfu.ca/accessible-learning) (caladmin@sfu.ca)