SPRING 2016 - STAT 270 D900

INTRODUCTION TO PROBABILITY AND STATISTICS (3)

Class Number: 3228   Delivery Method: In Person

COURSE TIMES + LOCATION:

Tu 8:30 AM – 10:20 AM
SUR 5140, Surrey

Th 8:30 AM – 9:20 AM
SUR 5140, Surrey

EXAM TIMES + LOCATION:

Apr 14, 2016
8:30 AM – 11:30 AM
SUR 5280, Surrey

INSTRUCTOR:

Derek Bingham
dbingham@sfu.ca
778-782-3426
Office: SC-K10569

COREQUISITES:

MATH 152 or 155 or 158. Students wishing an intuitive appreciation of a broad range of statistical strategies may wish to take STAT 100 first.

Description

CALENDAR DESCRIPTION:

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

COURSE DETAILS:

Lab Instructor: Marie Loughin

Outline:

1. Introduction to graphical and numerical descriptive statistics including histogram, boxplot, scatterplot, sample mean, sample median, sample standard deviation and sample correlation coefficient.
2. Elementary probability rules, basic combinatorial formulae, conditional probability and independence.
3. Introduction to discrete distributions including probability mass function, expectation, binomial distribution and Poisson distribution.
4. Introduction to continuous distributions including probability density function, expectation, 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, Central Limit Theorem.
5. Single sample inference including estimation and testing for proportions and means.
6. Two sample inference including estimation and testing for differences in proportions and differences in means, paired data.

Grading

Assignments	10%
Midterms	40%
Final Exam	50%

NOTES:

All grading is subject to change.

There will be no make-up midterms. Students who provide a valid medical excuse (the needed form is at https://www.sfu.ca/mbb/Ugrd/documents/healthcare-statement-general.pdf) will be graded based on the remainder of the exams.

Materials

REQUIRED READING:

Required Textbook:

Introduction to Probability and Statistics, 2nd ed. by Tim Swartz. Publisher: Pearson.
ISBN: 978-1-269-73721-0

DEPARTMENT UNDERGRADUATE NOTES:

Students with Disabilites:
Students requiring accommodations as a result of disability must contact the Centre for Students with Disabilities 778-782-3112 or csdo@sfu.ca

Tutor Requests:
Students looking for a Tutor should visit http://www.stat.sfu.ca/teaching/need-a-tutor-.html. We accept no responsibility for the consequences of any actions taken related to tutors.

REGISTRAR NOTES:

SFU's Academic Integrity web site http://students.sfu.ca/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 sJho pursue their studies honestly. Scholarly integrity is required of all members of the University. http://www.sfu.ca/policies/gazette/student/s10-01.html

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