

FALL 2017 - STAT 342 D100

INTRODUCTION TO STATISTICAL COMPUTING AND EXPLORATORY DATA ANALYSIS - SAS (2)*Class Number: 4489 Delivery Method: In Person***COURSE TIMES + LOCATION:**Th 12:30 PM – 2:20 PM
EDB 7618, Burnaby**EXAM TIMES + LOCATION:**Dec 17, 2017
12:00 PM – 3:00 PM
SSCB 9200, Burnaby**INSTRUCTOR:**Jack Davis
jackd@sfu.ca**PREREQUISITES:**

STAT 285 or STAT 302 or STAT 305 or BUEC 333.

Description

CALENDAR DESCRIPTION:

Introduces the SAS statistical package. Data management; reading, editing and storing statistical data; data exploration and representation; summarizing data with tables, graphs and other statistical tools; and data simulation. Students with credit for STAT 340 may not take STAT 342 for further credit.

COURSE DETAILS:**Course Outline:**

SAS component

1. What is SAS?
 - Downloading and installing
 - Overview of the system
2. Data management in SAS
 - a. Data input and structures
 - DATA step
 - Reading specially formatted files
 - Date/time/character formats and manipulations
 - Derived variables
 - Exporting
 - b. Data access: from database systems using query languages
 - c. Merging and reshaping data
 - sorting/subsetting (set/if/where statements)/ merging/transposing
 - processing using DO LOOPS and SAS arrays
 - modify variable attributes
3. Data exploration and representation in SAS
 - basic procs (print, plot, tabulate, means, univariate, freq)
 - by statement and uses in analysis and simulation
 - output delivery system to extract information from analyses
4. Data simulation in SAS

Grading

Term Test	50%
Final Exam	50%

NOTES:

Above grading is subject to change.

Materials

REQUIRED READING:**Required Text:**

SAS and R, Data Management, Statistical Analysis, and Graphics, 2nd ed, by Ken Kleinman and Nicholas J. Horton, Publisher: CRC Press

Hard Copy ISBN: 9781466584495

eBook ISBN: 9781466584501

eBook Rental ISBN: 9781466584501

DEPARTMENT UNDERGRADUATE NOTES:**Students with Disabilities:**

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.

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