STA5066, Data Management and Analysis with SAS
Fall 2021

Instructor: Dr. Justin Shows
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In-person office hours: 1:30-2:30 TuTh
Zoom appointments for other times may be requested by e-mail.
https://fsu.zoom.us/j/4722571439   with Meeting ID 472 257 1439.

Attendance will be taken the first week of class via an ungraded online quiz.   If you do not complete the quiz by the due date, the Registar's Office may drop you from the course.   I expect you to keep up-to-date with the lessons, activities and announcements by getting in touch with a classmate or with me, **and** by reading the course site on Canvas.   Drop and withdrawal deadlines are given in the University's academic calendar at https://registrar.fsu.edu/registration_guide/fall/academic_calendar/

Course Materials: All course materials are online, see course Canvas page for link.

Certificate in *SAS Programming and Data Analysis:*

This course satisfies one of the four courses required for the SAS Programming and Data certificate jointly sponsored by FSU and the SAS Institute. **Students** interested in the program **must apply to the program before** the end of the semester in which **the second course in the program is taken**. In addition, a portfolio is required to be submitted in the last semester of program and a representative assignment and/or project from this course must be included. For more details see http://stat.fsu.edu/sas-certificate.

Important Dates: The due dates for all homework as well as the dates of the quizzes and midterms will be posted on Canvas

Textbook: There is no required text.   The following books are good resources:

A Handbook of Statistical Analyses using SAS, Third Edition by Geoff Der, and Brian S. Everitt. CRC Press.   (If you have some background with programming, this is an excellent book that covers more statistical material than the course, but much less on SAS programming.)

The Little SAS Book, A Primer, Fourth Edition, Lora Delwiche & Susan Slaughter.   (If you have no background in programming, this is an extremely good book that walks through the process.)

SAS Certification Prep Guide: Base Programming for SAS 9, Third Edition

Step-by-Step Programming with base SAS software.   (google it, **pdf is free**, ebook is <$3.50)

Accessing SAS Software: For this course we will use SAS On Demand for Academics. All programming will be done using a browser-based interface to the SAS cloud (Details will be provided in the first week's module).

Homework: All homework must be uploaded to Canvas. Assignments require you to submit **only the programs** that produce the output for the exercises in the assignment. **All homework materials must be assembled into a single file and this single file should be submitted** to the assignment posted on the course Canvas page**.**

Collaborative writing or copying of homework programs is not allowed. Homework Assignments may be discussed with other students (including using social media) but each student is required to write and assemble the programs required for the homework assignment on their own.

Questions about homework grades should first be addressed to the instructor.

Homework Grading:
   Late homework will be penalized 20% and no credit will be given for homework submitted more than one week after the due date.

Prerequisites: Previous background in statistics at least through linear regression or permission of the instructor.

Course Objectives: Upon completion of this course students will be able to manage data using the SAS system and will have completed the required course for graduate certification in Data Management and Analysis with SAS.

Course Description: This course provides an introduction to methods for managing and analyzing data using SAS. We will cover as many of the following topics as time permits:

1. Preliminaries
2. Introduction to SAS
3. SAS Programs
4. SAS Syntax
5. SAS Datasets
6. Reading SAS Datasets
7. Controlling Input and Output
8. Reading Raw Data
9. Manipulating Data
10. Editing Data
11. Processing Data Iteratively
12. Processing Text
13. Combining Datasets
14. Summary Reports

15. Enhancing Reports

Grading: The final course grade will be based on homework (50%), quizzes (35%), exam (15%). Letter grades are based on the following scale.

A	A-	B+	B	B-	C	D	F
95+	90-<95	85-<90	80-<85	75-<80	70-<75	<70	<60

Quizzes: There will be numerous quizzes. The quizzes will occur as topics are finished and will be announced on Canvas. **The quizzes are short, online, computer generated, and involve multiple choice, multiple answer, single answer, true/false etc. questions. Each student must take the test without consulting anyone else.** The quizzes will be made available for at least two days and you make take them twice. **The best attempt is included in the grade book.**

Midterm
There will be one midterm exam during the last week of classes. **The exam is online and consists of multiple choice, multiple answer, true-false, etc. questions. The exam will be timed (75 minutes), made available for three days, and you make take it twice, but the best attempt is included in the grade book.**

Academic Honor Code: All students are expected to uphold the Academic Honor Code. The Academic Honor System of the Florida State University is based on the premise that each student has the responsibility to:
> Uphold the highest standard of academic integrity in the student's own work.
> Refuse to tolerate violations of academic integrity in the University community.
> Foster a high sense of integrity and social responsibility on the part of the University community.

Americans With Disabilities Act:
Students with disabilities needing academic accommodation should:
(1) register with and provide documentation to the Office of Accessibility Services; and
(2) bring a letter to the instructor indicating the need for accommodation and what type.
Please note that instructors are not allowed to provide classroom accommodation to a student until appropriate verification from the Office of Accessibility Services has been provided.
This syllabus and other class materials are available in alternative format upon request.
For more information about services available to FSU students with disabilities, contact the:
Office of Accessibility Services
874 Traditions Way
108 Student Services Building
Florida State University

Tallahassee, FL 32306-4167
(850) 644-9566 (voice)
(850) 644-8504 (TDD)
oas@fsu.edu
https://dsst.fsu.edu/oas

Some Online Resources:
Some online tutorials:
http://support.sas.com/training/tutorial/

A complete listing of online help for SAS 9.4:
http://support.sas.com/documentation/94/

SAS Analytics U.   Numerous tutorials may be found on YouTube at:
https://www.youtube.com/playlist?list=PLVBcK_IpFVi9cajJtRel2uBLbtcLz-WIN

Numerous blogs covering different aspects of SAS are available at:
http://blogs.sas.com/content/

A good resource for many SAS topics is the UCLA web site:
http://www.ats.ucla.edu/stat/sas/

Documentation SAS formats and informats:
http://support.sas.com/documentation/cdl/en/leforinforref/64790/HTML/default/viewer.htm#titlepage.htm

Documentation, SAS Procedures:
http://support.sas.com/documentation/cdl/en/allprodsproc/67392/HTML/default/viewer.htm#titlepage.htm

Documentation, SAS Functions and Call Routines:
http://support.sas.com/documentation/cdl/en/lefunctionsref/67398/HTML/default/viewer.htm#titlepage.htm