STA5067, Advanced Data Management and Analysis with SAS
Spring 2023

Instructor: Dr. Justin Shows
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Office: OSB 307
This course is being held remotely.
In-person office hours will be held 1:00-2:00 on Tuesdays and Thursdays. You can also make an appointments for Zoom calls through e-mail. I am available days, nights, and on weekends. The Zoom link is

https://fsu.zoom.us/j/4722571439 with Meeting ID 472 257 1439.

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 midterms will be posted on Canvas under the assignments tab on the course Canvas page.

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

The Essential PROC SQL Handbook by Prairie
SAS Macro Programming Made Easy by Burlew

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

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 grader.

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. The lowest score will be dropped.

Prerequisite: STA 5066

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 additional methods for managing and analyzing data with the SAS system. It covers as many of the following topics as time permits:

1. Advanced data step topics
2. Manipulating data with PROC SQL
3. SAS macro facility
4. Simulation with the data step
5. Analyses with PROC IML

Grading: The final course grade will be based on homework (70%), exam 1 (15%), and exam 2 (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

Exams
There will be two exams during the semester. **The exams are online and consist of multiple choice, multiple answer, true-false, etc. questions. The exams will be timed, made available for five days, and you make take it twice, but only the best attempt is included in the grade book.**
Exam 1 will cover PROC SQL and will be given the week of February 27-March 3.
Exam 2 will cover the macro facility and will be given the week of April 17-21.

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