Professor: Dr. Thomas Fisher **Office:** 305B Upham Hall **Telephone:** (513) 529-2176

Email: *fishert4@miamioh.edu* (best)

Office Hours: MW 3:30-4:30

TuTh 10:00-11:30 and by appointment

Personal Website: http://www.users.miamioh.edu/fishert4/

and Canvas site

Class Materials: Notes and textbook

Textbook: Statistical Programming in SAS by A. John Bailer **References:** SAS Website & countless other online resources

Software: SAS 9.4: Commercial Software, Miami University site licensed:

Download SAS for Windows from https://software.miamioh.edu/store/ using a wired connection. To install SAS on a Mac, you must first install Windows. SAS help is available at the MiTech Center in the Shriver Center. SAS is also available

via server from computers in the BEST and King Libraries.

Bulletin Introduction to the use of computers to process and analyze data. Techniques and **Description:** strategies for managing, manipulating, and analyzing data are discussed. Emphasis

is on the use of the SAS system. Statistical computing topics, such as random number generation, randomization tests, and Monte Carlo simulation, will be used

to illustrate these programming ideas.

Topic Outline: Emphasis on programming concepts, techniques and strategies for:

- Managing data input, output, selection, modification and merging;
- Invoking statistical and mathematical functions or procedures;
- Creating tabular and graphical displays of data and analyses;
- Performing randomized (e.g., Monte Carlo) simulations and methods.

In-depth treatment of several SAS programming frameworks (DATA step, macros, IML and select PROCedures) and an overview of R.

Midterm: The SAS Base Certification practice exam will given as a midterm exam and will provide a gauge of progress towards passing the certification exam. Students are encouraged to take the SAS Base Certification exam following this class. As a student the exam cost \$90.

The practice exam will be given on Friday, April 14

Homework: I anticipate assigning several problems as graded homework each week, due on Friday the following week. Late homework will be accepted only with prior permission from the instructor. Homework requirements & expectations are provided in the file "HomeworkRequirements.pdf" on the canvas site.

Project: An individual term project is required in lieu of a final exam. It will consist of several graded phases/milestones: a proposal, progress report, rough draft and final report with documented code. Details will be provided in a few weeks once we have covered some course material.

Attendance: The pace of this class is such that it will not be advisable to miss any sessions. If you know you will be absent, please inform me in advance. When you are absent, it will be your responsibility to contact another student for the notes and announcements. While attendance does not factor into your grade, I may take attendance for my own records. You are expected to be an active participant for the entire 55-minute class. Indications that this is not happening include sleeping, surfing the web or instant messaging on your laptop, text-messaging on your cell-phone, studying for another class, etc. Please turn your cell phone to silent before class. Students are expected to wait quietly for 15 minutes after class is scheduled to begin. If I have not yet appeared the students are free to leave.

Letters of If you have a letter stating specific testing accommodations to which you are Accommodation: entitled, please come by my office to discuss the accommodations that you will need and to give me a copy of the letter. Even if you do not anticipate using any accommodations, it is a good idea to turn in the letter as soon as possible. Please note that unless I have at least one week's notice I will be unable to provide any accommodation on an exam

Prerequisites: A second course in Statistics: STA 333, 363, 463/563, 672 or ISA 291

Student Code of Any violations of Academic Integrity within the Student Handbook will not be

Conduct: tolerated. This includes cheating, plagiarism, storing information in a calculator, sabotage of another's work and disrupting class. See the Handbook for a complete listing of the student code of conduct. All violations will be handled in accordance with established procedures and policies concerning student academic responsibility. See the Bulletin for additional details:

> http://miamioh.edu/academics/bulletin/ http://www.miamioh.edu/handbook

Final Grades: At the conclusion of the semester, final grades will be compiled using:

Source	Amounts
Homework	65%
Midterm	5%
Project	30%
Total	100%

Grades will be assigned based on:

[97, 100)	A+	[92, 97)	A	[90, 92)	A-
[87, 90)	B+	[82, 87)	В	[80, 82)	В-
[77, 80)	C+	[72, 77)	C	[70, 72)	C-
[67, 70)	D+	[62, 67)	D	[60, 62)	D-
		[0, 60)	F		