Statistics 426 – SAS Programming – Spring 2022

Instructor: Dr. Chris Williams
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Office Hours MWF 3:30-4:30 or by appointment.
Meeting times: MWF 2:30-3:20
Prerequisites: Stat 251, Stat 301, or equivalent coursework.

Course Text
There is no course text, but we will use some SAS webpages for reference.

Course Website
https://www.webpages.uidaho.edu/~chrisw/stat426/
The website will contain announcements, summaries of lectures, lists of assignments, and other information. The website and Canvas complement each other and will both be used throughout the course.

Course Description
Coverage of a variety of methods for data manipulation, data management, and programming in the SAS language. DATA step programming methods including data transformation, functions for numeric and character data, input of complicated data files, and do loop usage. Data management topics include concatenating data files, sorting and merging data files and ARRAY statement usage. SAS programming with SAS modules such as SAS/Graph, SAS/IML, and SAS/Macro language. Other topics in SAS programming, such as covering other SAS modules in depth.

Course Learning Outcomes
Ability to use the SAS Data step to read data in several formats
Ability to create SAS libraries to store data
Ability to manipulate data using numeric and character functions
Ability to perform conditional processing and subset observations and variables
Ability to combine data sets vertically and horizontally
Ability to use selected SAS Procedures (SORT, FORMAT, etc.)
Familiarity with selected topics (SAS Macro language, SAS/IML, etc.)

Lecture Outline
Our schedule will be listed on the course lecture page. We will use Canvas discussions as an additional way to give comments and ask questions.

Grades
The course grade will be determined by programming assignments exams and a project. There will be programming assignments due weekly (on most weeks), a subset of 3-5 of these assignments will be graded.
The project will be due at the end of the course and will involve using some of the topics covered in the course. Assignments will constitute 70% of the grade, and the project will count as 30% of the grade.

Assignments: For each assignment, submit both the code from the SAS editor window and the text from that SAS log in a Word document. I may also ask that you include output from your program in a separate document, it would be requested specifically for certain assignments. These document(s) will be submitted via Canvas, and as noted above, a subset of between 3-5 of these will be graded.

Academic Honesty
You should be aware of University of Idaho policies concerning academic honesty (see Article II of the Student Code of Conduct). Breaches of academic honesty will not be tolerated and will result in an F for the course and referral to the Dean of Students for further disciplinary action.

On programming assignments, it is considered cheating to: copy someone else's program, adapt someone else's program by changing variable names, to read someone else's program and follow their approach, or to allow someone else to do any of these with your program. (This description is credited to Renae Shrum in her Stat 426 syllabus)

Center for Disability Access and Resources
Students with disabilities needing accommodations to fully participate in this class should contact Center for Disability Access and Resources (CDAR). All accommodations must be approved through CDAR prior to being implemented. To learn more about the accommodation process, visit CDAR's website at www.uidaho.edu/cdar or call 208-885-6307.

Healthy Vandals Policies
It is a longstanding tradition that Vandals take care of Vandals, and we all do our best to look out for the Vandal Family. These simple precautions go a long way in reducing the impact of coronavirus on our campuses and in our communities. With everyone engaging in these small actions, we can continue to participate in our vibrant campus culture where we are able to learn, live, and grow. Visit the University of Idaho COVID-19 webpage often for the most up-to-date information about the U of I's response to Covid-19.

- Masks are required, in all university buildings, regardless of vaccination status. Faculty may wear a face shield to lead classes and must maintain 6 feet of distance while wearing the shield. These requirements will be reviewed on a periodic basis and are subject to change.
- All classes are offered in the modality listed in the catalog.
- All Vandals are highly encouraged to be vaccinated.
- COVID-19 tests are not required to attend class in person.

Additionally, faculty and students must follow the Healthy Vandal Pledge.
University of Idaho Classroom Learning Civility Clause
In any environment in which people gather to learn, it is essential that all members feel as free and safe as possible in their participation. To this end, it is expected that everyone in this course will be treated with mutual respect and civility, with an understanding that all of us (students, instructors, professors, guests, and teaching assistants) will be respectful and civil to one another in discussion, in action, in teaching, and in learning. Should you feel our classroom interactions do not reflect an environment of civility and respect, you are encouraged to meet with your instructor during office hours to discuss your concern. Additional resources for expression of concern or requesting support include the Dean of Students office and staff, the UI Counseling & Testing Center’s confidential services, or the UI Office of Human Rights, Access, & Inclusion.