

# CSC 433 Scripting for Data Analysis

Steve Jost [[/about/pages/people/facultyinfo.aspx?fid=495](http://about/pages/people/facultyinfo.aspx?fid=495)]

Office: CDM 744

Spring 2016-2017

Class number: 33720

Section number: 901

M 5:45PM - 9:00PM

LEWIS 01216 Loop Campus

Course homepage: <http://facweb.cs.depaul.edu/sjost/csc433/> [<http://facweb.cs.depaul.edu/sjost/csc433/>]

## Summary

Data access and transformation with modern statistical software such as SAS and R. Report writing, data graphing and visualization, writing macros and functions to automate tasks and analyses.

## Texts

Delwiche and Slaughter, The Little SAS Book, 5th Edition, SAS Institute, 2012

Paul Teetor, R Cookbook, O'Reilly, 2011.

## Grading

- Grading Scale: 94-100: A; 89-93: A-; 85-88: B+; 80-84: B; 75-79: B-; 70-74: C+; 65-69: C; 60-64: C-; 55-59: D+; 50-54: D; 0-49: F.
- Grading Breakdown: Final Exam: 40%; Projects: 50%; D2L Quizzes: 10%.
- Late penalties for projects: up to one week late: 10%, one to two weeks late: 30%, two to three weeks late: 70%, three or more weeks late: 100%.
- A 15% resubmit penalty will be assessed for a resubmitted assignment if resubmitted within one week. Normally a maximum of one assignment can be submitted during the class. A resubmitted assignment is subject to the above late penalties.

## Prerequisites

Some knowledge of programming. A first statistics course such as IT 403. Knowledge of SAS or R is not assumed.

## Other Regulations

- Class registration is not allowed after the first week of class.
- Students must keep backup copies of all submitted assignments in case an assignment must be resubmitted
- Extra credit assignments are not given.
- No late assignments will be accepted after final grades are submitted to the registrar.
- An incomplete is hard to get in CDM. It is only allowed for a major illness (typically requiring hospitalization) or a death in the family. In any case documentation is required, and at least one half of the work must be completed for the course.
- Submitting a wrong version of an assignment is not a valid reason to waive the late penalty.
- If you have trouble submitting any project, email the completed project to the professor to prove that you completed it on time.

Students wishing to reschedule the exam must contact the professor at least one week in advance.

Week 1. Course overview. Intro to Base SAS. Inputting data, informats. Data transformation and manipulation. Missing values. Error detection and correction.

Control structures (if, do, select). Modifying and combining SAS datasets. Permanent SAS datasets.

SAS graphics and data visualization.

Proc sql. Indexed datasets. Report writing.

SAS Macro applications. Discuss exam questions.

Introduction to R language. R datatypes.

Structured programming. User defined R functions. R packages. Simulations.  
R graphics and data visualization.  
S3 and S4 R classes.  
Optional Topics. Final exam in Week 11.

# School policies:

## Changes to Syllabus

This syllabus is subject to change as necessary during the quarter. If a change occurs, it will be thoroughly addressed during class, posted under Announcements in D2L and sent via email.

## Online Course Evaluations

Evaluations are a way for students to provide valuable feedback regarding their instructor and the course. Detailed feedback will enable the instructor to continuously tailor teaching methods and course content to meet the learning goals of the course and the academic needs of the students. They are a requirement of the course and are key to continue to provide you with the highest quality of teaching. The evaluations are anonymous; the instructor and administration do not track who entered what responses. A program is used to check if the student completed the evaluations, but the evaluation is completely separate from the student's identity. Since 100% participation is our goal, students are sent periodic reminders over three weeks. Students do not receive reminders once they complete the evaluation. Students complete the evaluation online in [CampusConnect](https://campusconnect.depaul.edu) [<https://campusconnect.depaul.edu>].

## Academic Integrity and Plagiarism

This course will be subject to the university's academic integrity policy. More information can be found at <http://academicintegrity.depaul.edu/> [<http://academicintegrity.depaul.edu/>] If you have any questions be sure to consult with your professor.

## Academic Policies

All students are required to manage their class schedules each term in accordance with the deadlines for enrolling and withdrawing as indicated in the [University Academic Calendar](http://oaa.depaul.edu/what/calendar.jsp) [<http://oaa.depaul.edu/what/calendar.jsp>]. Information on enrollment, withdrawal, grading and incompletes can be found at <http://www.cdm.depaul.edu/Current%20Students/Pages/PoliciesandProcedures.aspx> [[/Current%20Students/Pages/PoliciesandProcedures.aspx](http://www.cdm.depaul.edu/Current%20Students/Pages/PoliciesandProcedures.aspx)].

## Students with Disabilities

Students who feel they may need an accommodation based on the impact of a disability should contact the instructor privately to discuss their specific needs. All discussions will remain confidential.  
To ensure that you receive the most appropriate accommodation based on your needs, contact the instructor as early as possible in the quarter (preferably within the first week of class), and make sure that you have contacted the Center for Students with Disabilities (CSD) at:

Lewis Center 1420, 25 East Jackson Blvd.  
Phone number: (312)362-8002  
Fax: (312)362-6544  
TTY: (773)325.7296

↶

[privacy statement](#) [[/Pages/Privacy.aspx](#)]

