

Syllabus STAT 380 (Spring 2018)

Data Science Through Statistical Reasoning and Computation

Instructor: Murali Haran, Professor, Department of Statistics, Penn State University, University Park, PA.

Office: 421D Thomas Building. Phone: 863-8126.

Office Hours: Tuesdays and Wednesdays 2:30 - 3:30 pm

Teaching Assistant: Alex Zhao, PhD Student, Statistics

Office Hours Location: 301 Thomas Bldg email: yazhao@psu.edu

Office Hours: Tuesdays and Wednesdays 1:30-2:30 pm

Communication: You can reach me and the TA through email via Canvas.

Class Times: Tuesday, Thursday 10:35am-11:50am in 107 Wartik

Textbook: *Data Technologies and Computational Reasoning* by D. Nolan and D. Temple Lang (pdf files will be posted weekly online on Canvas)

Supplement: *Data Science in R: A Case Studies Approach to Computational Reasoning* by Nolan and Temple Lang.

Course Schedule: <http://personal.psu.edu/muh10/380/schedule380.2018.html> This will change so keep checking back for updates!

Canvas and Course Website: The course will be run through Canvas. The public access site: <http://personal.psu.edu/muh10/380/380.html>

Final Course Grades will be based on:

Weekly homework and projects: 35%.

Midterm exam: 25%

Tentative midterm date: Thursday, March 1st (just before spring break).

Final exam: 40%. (The final will be comprehensive.)

Prerequisites/programming: Please make sure that you meet the prerequisite. Most homework problems will require programming in R, and I will assume you know basic statistics.

Homework grading: Each homework counts for 30 points: 5 each for four selected problems (selected after submission) and 10 for an organized and easy-to-follow completed assignment, including *non-graded* problems. If there are no more than five problems in the assignment, all of them will be graded and points assigned appropriately. You will not receive full credit unless you show your work when solving each problem. You may discuss them with others but they must be written up independently.

Course Rules:

1. No make-up exams will be given for ANY reason. If you miss an exam, you should provide a valid reason to the instructor; once the instructor approves your excuse, your missed exam score will be replaced by some combination of your other course grade.
2. Early exams might be allowed, with prior arrangement, for students with direct conflicts due to other required university activities (chess team, field trip, Blue Band trip, etc.) The director of that program must provide a letter requesting that you be excused.
3. Homework will typically be due on Thursdays *in class*. You can submit it in my mailbox in Thomas 326 by 3:30pm on the same day it is due with a 20% reduction in your score. No late homework will be accepted after that time under any circumstance. *You have 1 week to appeal a grade. No grade changes will be made 1 week after a graded homework or exam is returned.* Your two lowest homework scores will be dropped when computing your final grade, which should allow for missing homework due to unavoidable circumstances.
4. Students are responsible for all announcements and supplements given within any lecture and email.
5. Academic Integrity and Mutual Respect: All Penn State University, College of Science, and Department of Statistics policies regarding ethics, honorable behavior, and mutual respect apply in this course.
 - Penn State's Policies <http://www.psu.edu/ufs/policies/>
 - College of Science's Academic Integrity Policy <http://science.psu.edu/current-students/Integrity/Policy.html>
 - College of Science's Code of Mutual Respect and Cooperation <http://science.psu.edu/climate/code-of-mutual-respect-and-cooperation>
6. If you have a disability-related need for reasonable academic adjustments in this course, contact the Student Disability Resources (SDR) at 814-863-1807 or visit their website <http://equity.psu.edu/student-disability-resources>