Special Topics: Data Analytics in Finance
FIN 579 – Winter 2021
Prof. Thomas Gilbert

The goal for this class is to learn new technical data analytics skills in three areas of business: finance, microeconomics, and macroeconomics. The focus will be on time-series models, causal experiments, and textual analysis. Time permitting, we will also touch on other topics such as clustering, principal component analysis, classification, and nonparametrics.

Optional textbook: "Business Data Science" by Matt Taddy, available for free online through the UW library

https://alliance-primo.hosted.exlibrisgroup.com/permalink/f/kjtuig/CP71310712980001451

Required software: We will be using R in this class and I will be coding in R via R Studio. Both are free and must be downloaded in installed prior to the first class.

https://www.r-project.org/

https://rstudio.com/products/rstudio/download/ (desktop version)

Individual homework: There will be six weekly homework assignments, to be completed on your own. You must hand in your write-up and code electronically via Canvas on the due date.

Group project: The final assignment of this course will consist of a group project (teams of five students, to be entered on Canvas). Your goal is to apply the techniques learned in class to a new dataset with a novel question. There are multiple deliverables for this project:
1) Two progress reports
2) A 15-minute presentation during the last class of the quarter (order randomly assigned)
3) A 5-10 page report due the day before the last class, with code and dataset
4) A peer evaluation of your group members due the day after the last class.

Grading: 50% on individual homework (equally weighted, lowest one dropped) and 50% on the group project.

Foster code of conduct: By being a student in this course, you acknowledge that you are a part of a learning community at the Foster School of Business that is committed to the highest academic standards. As a part of this community, you pledge to uphold the fundamental

standards of honesty, respect, and integrity, and accept the responsibility to encourage others to adhere to these standards.

Religious accommodations: Washington state law requires that UW develop a policy for accommodation of student absences or significant hardship due to reasons of faith or conscience, or for organized religious activities. The UW's policy, including more information about how to request an accommodation, is available at Religious Accommodations Policy. Accommodations must be requested within the first two weeks of this course using the Religious Accommodations Request form.