

ITS836 Mid-term Exam Info

- 15 questions
- Short answer (i.e. a few sentences max)
- 90 minutes
- All questions are from the textbook
- Only 1 question on R (and that should be easily extracted from the book.)
- The goal is to assess your knowledge of:
 - ▶ Understanding Data Science, Big Data, and Analytics
 - ▶ Managing a project using the Data Analytics Lifecycle
 - ▶ Selecting the appropriate type of analysis model for different types of data
 - ▶ General characteristics of analysis methods

General notes

- Be familiar with end of chapter questions
 - ▶ I won't ask very specific questions that require computation or interpretation of data
 - ▶ This exam is about assessing general domain understanding – not statistics and analysis details
- Don't worry about specific analytic tools
- Don't worry about Yoyodyne specifics
- Know the very basic (simple) R commands to visualize data
 - ▶ No tricks here – just the simple commands to look at data
 - ▶ (Assignment 1 - #1 -#4)
- Be able to discuss hypotheses and error types
- Be able to explain supervised vs. unsupervised learning

General notes, continued

- Know use cases for various analytic methods
 - ▶ i.e. an example of when a method would be useful
- Know the big topics associated with methods we discussed (not formulas – just general description or how used)
 - ▶ General steps in major algorithms (when presented in the book)
 - ▶ Support
 - ▶ Confidence
 - ▶ Hold-out data
 - ▶ Lift/Leverage
- Be able to explain how analytic methods we've studied differ
 - ▶ (i.e. Linear regression is predictive, while clustering shows existing similarities)

Most importantly ...

- What you need to do to succeed on my exams
 - ▶ Read the assigned chapters
 - ▶ Listen to the lectures
 - ▶ Try out at least some of the examples from the book
- That's pretty much it
- Being friends with R is not required to do well on this exam