

CWRU DSCI351-451: Exploratory Data Science

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2.1.1.1 Reading, Homeworks, Projects, SemProjects

- Readings:
 - for today: RPR 35-64
 - For Thursday RPR 65-93
- Homeworks
 - HW1 due today
 - HW2 available on Thursday
- Data Science Projects:
- 451 SemProjects:
- Friday Comm. Hour

2.1.1.2 Textbooks

- [Peng: R Programming for Data Science](#)
- [Peng: Exploratory Data Analysis with R](#)
- [Open Intro Stats, v3](#)
- [Wickham: R for Data Science](#)
- [Hastie: Intro to Statistical Learning with R](#)

2.1.1.3 Syllabus

2.1.2 Links

| Day:Date | Foundation | Practicum | Reading | Due |
|------------------|-----------------------------------|-----------------------------------|-------------------|-------------------------|
| w1a:Tu:8/28/18 | ODS Tool Chain | R, Rstudio, Git | | |
| w1b:Th:8/30/18 | Setup ODS Tool Chain | Bash, Git, Twitter | PRP4-33 | HW1 |
| w2a:Tu:9/4/18 | What is Data Science | OIS:Intro2R | PRP35-64 | HW1 Due |
| w2b:Th:9/6/18 | Data Analytic Style, Git | Teatime:Intro2R, For loops | PRP65-93 | HW2 |
| w3a:Tu:9/11/18* | Struct. of Data Analysis, SemProj | ISLR:Intro2R | PRP94-116 | HW2 Due |
| w3b:Th:9/13/18* | OIS3 Intro to Data | GapMinder, Dplyr, Magrittr | OI1-1.9, | |
| w4a:Tu:9/18/18 | OIS3, Intro2Data part 2, Data | EDA: PET Degr. | EDA1-31 | Proj1 |
| w4b:Th:9/20/18 | Hypothesis Testing | GGPlot2 Tutorial | EDA32-58 | HW3 |
| w5a:Tu:9/25/18 | Distributions | SemProj RepOut1 | R4DS1-3 | HW3 Due |
| w5b:Th:9/27/18 | Wickham DSCI in Tidyverse | SemProj RepOut1 | R4DS4-6 | SemProj1, |
| w6a:Tu:10/2/18 | OIS Found. of Inference | Inference | R4DS7-8 | Proj1 Due |
| w6b:Th:10/4/18 | | Midterm Review | R4DS9-16 Wrangle | |
| w7a:Tu:10/9/18* | Summ. Stats & Vis. | Data Wrangling | | |
| w7b:Th:10/11/18* | MIDTERM EXAM | | | HW4 |
| w8a:Tu:10/16/18 | Numerical Inference | Tidy Check Explore | OIS4 | HW4 Due |
| w8b:Th:10/18/18 | Algorithms, Models | Pairwise Corr. Plots | OIS5.1-4 | Proj 2, HW5 |
| Tu:10/23 | CWRU FALL BREAK | | R4DS17-21 Program | |
| w9b:Th:10/25/18 | Categorical Infer | Predictive Analytics | OIS6.1,2 | |
| w10a:Tu:10/30/18 | SemProj | SemProj | OIS7 | SemProj2 HW5 Due |
| w10b:Th:11/1/18 | Lin. Regr. | Lin. Regr. | OIS8 | Proj.2 due |
| w11a:Tu:11/6/18 | Inf. for Regression | Curse of Dim. | OIS8 | Proj 3 |
| w11b:Th:11/8/18 | Model Accuracy | Training Testing | ISLR3 | HW6 |
| w12a:Tu:11/13/18 | Multiple Regr. | Mul. Regr. & Pred. | ISLR4 | HW6 due |
| w12b:Th:11/15/18 | Classification | | ISLR6 | |
| w13a:Tu:11/20/18 | Classification | Clustering | ISLR5 | Proj 3 due |
| Th:11/22/18 | THANKSGIVING | | | Proj 4 |
| w14a:Tu:11/27/18 | Big Data | Hadoop | | |
| w14b:Th:11/29/18 | InfoSec | VerisDB | | SemProj3 |
| w15a:Tu:12/4/18 | SemProj Re- portOut3 | | | |
| w15b:Th:12/6/18 | SemProj Re- portOut3 | | | Proj4 |
| | FINAL EXAM | Monday 12/17, 12:00-3:00pm | Olin 313 | SemProj4 due |

Figure 1: DSCI353-453 Syllabus