Professor McDonald  
FNCE 5352   
February 25, 2018  
Prerequisites for R Programming Section

# Course Materials

Course materials can be found at <https://github.com/mattmcd71/fnce5352_spring18>

# R Fundamentals

The course assumes some intermediate understanding of the R programming language. If you would like to get a basic introduction to the R programming language, please visit the following link:

<https://www.rstudio.com/online-learning/>

# R Installation

I will be periodically using R and RStudio interactively during the class instruction. If you would like to follow along during the class, please follow these instructions

Local Installation Instructions:

## R

I’ll be using the the most recent version of R locally but I believe that anything > 3.4.1 should be fine.

R can be downloaded from the following link: <https://www.r-project.org/>

## RStudio

RStudio is an Interactive Development Environment for the R programming language. It is very useful. You can download it at:

<https://www.rstudio.com/products/rstudio/download/>

## R Packages

The package installation instructions are:

from\_cran <-

c("AmesHousing", "broom", "caret", "devtools", "doParallel", "e1071", "earth",

"glmnet", "ipred", "klaR", "pROC", "rpart", "rsample", "sessioninfo",

"tidyposterior", "tidyverse", "yardstick", “recipes”, “ggplot2movies”)

install.packages(from\_cran, repos = "<http://cran.rstudio.com>")

That install.packages command may additionally install over 100 more packages.

To verify the installation, try running:

library(caret)

library(tidyposterior)

library(dplyr)

library(recipes)

library(AmesHousing)

ames <- make\_ames()

# Installing packages from github (optional)

The caret and Recipe package may need to be installed from github to get all functionality presented in class. Instructions for that are below:

The package installation instructions are:

library(devtools)

install\_github("topepo/recipes")

That install.packages command may additionally install over 100 more packages.

If you can install from source, it would be good (but not required) to get the development version of caret too:

install\_github("topepo/caret", subdir = "pkg/caret")