

Professor McDonald
FNCE 5352
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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")
```