PSY 491.1 Selected Topics in Psychology 2[1]

Data Analysis of Psychological Sciences with R Language

Marmara University - 2022-2023 Fall

Instructor: Arif Yasin Kavdır

E-mail address: arifyasinkavdir@gmail.com

Office hours: 15:00-17:00 Thursday[2]

Course Objectives

In this course we will focus on developing your data analysis and programming skills in R language. At the end of the semester, you will be expected to be able to analyze data from psychological sciences via coding in R. The topics that will be covered and discussed in class are indicated in the weekly plan.

Course Material

Wickham, H., & Grolemund, G. (2016). *R for data science: import, tidy, transform, visualize, and model data*. " O'Reilly Media, Inc.".

Course Requirements

- **Assignments (%20)**
- **Practice Experiment Report (%30)**
- **Final Exam (%50)**

Weekly Plan

6 October

General Introduction, Syllabus Review

13 October

R and RStudio Installation and Basic Terminology.

20 October

Introduction to Programming: Variables, Data Types, Operators, Functions, Vectors

27 October

Data Visualization

---

[1] There is possibility of some changes to increase efficiency and benefit.

[2] Office hours take place online. If you would like to meet, email me beforehand and I will send you a link for the meeting.

3 November

Data Transformation and Exploratory Data Analysis

10 November

Tibbles and Tidy Data

17 November

Data Import and Data Wrangling

24 November

Pipes and Using Them with Functions

1 December

Iteration

8 December

Modelling: Model Basics

15 December

Model Building

22 December

Conducting Regression Analysis

29 December

T-test and ANOVA in R

5 January

Reporting the Results: R Markdown

12 January

Recap and Further Potential Usage of R