

# Regression I



USC SPEC Lab Spring 2025

**The goal:** This module will explore fundamental statistical techniques commonly used in data analysis and research. We will introduce basic commands and operations to conduct preliminary ordinary least squares (OLS) regressions; interpret the regression results such as statistical T-tests, standard errors, and P-values; and calculate and analyze correlations.

## 1. Introductory Videos

[What Regression Is and Does](#)

[Experiments](#)

[Line of Best Fit](#)

[Multiple Regression](#)

## 2. Walk Through Work

Applied Introduction to T-Tests, Correlation, and OLS regression

## 3. Group Work

Practicing with the Human Development Index Data

## 4. Individual Work

Homework Problem Set

## Resources

R Studio Cheat Sheets

- [Data Transformation with dplyr](#)
- [Data Import with readr, readxl, and googlesheets4](#)
- [ggplot2 cheatsheet](#)