

# Regression Analysis

EDUC/PSY 7610

Regression Analysis is designed to provide the student with a practical, applied approach to the application of fundamental behavioral and educational research design and statistical principles. Students will learn how to differentiate and appropriately select the best statistical methods for use in various research designs and analytical problems. This course will mostly focus on the general linear model, the building block of nearly all analyses discussed in EDUC/PSY 6600.

*The syllabus from the latest Spring semester can be found at:*

<https://tysonbarrett.com/syllabus/educ7610>

## Summer Semester

The summer course takes place in the second 7-weeks of the summer semester. It starts June 28<sup>th</sup> and goes until Aug 13<sup>th</sup>, meeting Mondays and Wednesdays from noon to 2:45pm. The summer semester will be Web Broadcast (i.e., via Zoom).

## Topics

Linear Regression

Multiple Regression

Causal Inference

Generalized Linear  
Models

Mediation and  
Moderation

Effect Sizes

## Course Structure

The course is a flipped classroom, with online recordings presenting the conceptual material and in-class activities (in this case via Zoom) focusing on discussion and applying material to real data in R (including the interpretation and communication of the results).