

# STAT 430: Advanced SAS

The course will cover advanced SAS coding concepts such as the use of SAS Macro, SAS SQL, as well as a combination of both. The course will also introduce students to SAS STAT coding for common statistical tests (such as t-test, ANOVA, linear regression, and others). Students will have the opportunity to practice in class, using sample datasets. Homework and project assignments will be provided as well.

## Learning Objectives

- Understand the principles of Macro variables and Macro functions
- Become proficient with writing Macro coding for new programs and adding Macro coding to existing programs
- Understand how to create tables using SAS SQL with a variety of conditions
- Combine knowledge of STAT330 concepts with SAS SQL and SAS Macro to solve complex data issues
- Use SAS STAT to perform statistical tests (t-test, ANOVA, correlation, linear regression, Chi-Squared, logistic regression)

**Credits:** 2

**Class Type:** Graduate Course

**Prerequisites:**

STAT 330 Introduction to SAS or equivalent at another college/university.

**Program:** Bioinformatics and Data Science