## Lab 6 – Sampling Methods/ Subset Selection / Ridge Regression / Lasso

For this lab, please work through the following sections from the *Introduction to Statistical Learning* with Applications in R (ISLR) book.

Please see <a href="https://faculty.marshall.usc.edu/gareth-james/ISL/">https://faculty.marshall.usc.edu/gareth-james/ISL/</a>.

A PDF copy of the ISLR book can be freely (and legally) downloaded from this website at <a href="https://faculty.marshall.usc.edu/gareth-james/ISL/ISLR%20Seventh%20Printing.pdf">https://faculty.marshall.usc.edu/gareth-james/ISL/ISLR%20Seventh%20Printing.pdf</a>

## PART A – Sampling Methods

Lab 5.3 (page 190 - 197) covers Cross-Validation and the Bootstrap. Please complete sections 5.3.1 - 5.3.4.

## PART B – Subset Selection

Lab 6.5 (page 244 – 251) covers Subset Selection methods. Please complete sections 6.5.1 – 6.5.3.

## PART C – Ridge Regression & Lasso

Lab 6.6 (page 251-255) covers Ridge Regression and the Lasso. Please complete sections 6.6.1-6.6.2.