Calendar Course Description STAT 400 (3) Statistical Communication and Consulting

Development of broad guidelines for a comprehensive approach to data analysis with a focus on communicating statistical ideas from planning experiments to the presentation of results. Topics include criteria for selection of suitable methodologies, data preparation, outlier detection, and exploratory data analysis. Credit will be granted for only one of DATA 500 or STAT 400 when the subject matter is of the same nature. [3-0-0] Topics include: Discussion and review of the procedure of consulting Review R language (Chapter 2) and report (supplementary notes) Simple inference Conditional inference Analysis of Variance (ANOVA) Simple linear regression Multiple linear regression Generalized linear regression Recursive Partitioning Survival Analysis.