

## Class Schedule

Order	Chapter(s)	Topics
<b>0</b>	Chapters 1.3, 1.6, Appendix B.1 - B.8	Course overview including terminology and notation. General coding practice, R, split-apply-combine
<b>1</b>	Chapters 3 - 5 & 11	Data preprocessing, cross validation, & bootstrap. Parallelism . The Caret package in R. Measuring performance in regression & classification.
<b>2</b>	Chapters 6.1 - 6.2 & 12.1 - 12.3	Multiple linear regression, Logistic regression, Linear discriminant Analysis
<b>3</b>	Chapters 6.4 & 12.5	Penalized/regularized models
<b>4</b>	Chapters 6.4-6.5 & 12.7	Additional topics on penalized/regularized models such as relaxed lasso and sparse data
<b>5</b>	Chapters 7.1-7.5 & 13.1-13.2 & 13.4-13.7	Nonlinear methods including Neural Networks, Support vector machines, Splines, K-Nearest neighbors
<b>6</b>	Chapters 8.1-8.3 & 14.1-14.2	Decision trees
<b>7</b>	Chapters 8.4-8.5 & 14.3-14.4	Bagging and Random Forest
<b>8</b>	Chapters 8.6 & 14.5	Boosting
<b>9</b>	Notes	A very brief introduction to text processing
<b>10</b>	Chapters 16	Classification with severe class imbalance

**Note:**

The reason the chapters are so jumbled is that the book treats regression and classification separately. I feel for this class and the level at which it is being taught, that treating regression and classification simultaneously is more efficient and streamlined. This schedule is a general guide.