1. Reading 1: Bishop, Sec 1.5, Appendix C.

2. Reading 2: Classnotes Chapter 6

3.a) Implement the naïve Bayes classifier (NBC) on the Iris data (again mapping class 1 and 2 to a merged class). Use a 70% - 30% split between train and test data. Report only results on test data. For continuous attributes you may discretize them into 10 bins using “hist(X,10)” in matlab.

3.b) Plot your results using an ROC curve. You may use the matlab function “perfcurve”.

4. The NB classifier provides a posterior probability of predicting the test case to be in class 0 or 1. Is this estimate realistic or is it over-confident or under-confident? Explain your answer. (Hint: think about the assumptions of the NB classifier).