

**CSCI-UA 9473: INTRODUCTION TO MACHINE LEARNING**  
**SECTIONS COVERED BY THE FINAL**

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- Section 4.5, Everything except 4.5.1.
- Section 5. You must be able to explain the difference between generative and discriminative classifier. You must be able to give me one classifier from each family.
- Section 7, Everything
- Section 8, Everything
- Section 9, You must be able to explain the notions of bias Variance tradeoff, as well as the notion of Blue estimator.
- Section 10, Everything
- Section 11, You must be able to give me
  - The two characteristics of SVM
  - The final expression of the classifier (Eqs. 210 and 212) and explain how the characteristics relate to this expression.
  - The optimization formulation (Eq. 198), relate it to the distance of a point to a hyperplane.
- Section 12. Eq. 213. You don't need to know the details of backpropagation.
- Section 13, Everything but the EM algorithm.
- Section 14. For each model (FA, PCA, ICA) you must be able to provide a short description. You don't need to know 14.2.1.
- Section 15, Again, for each model you must be able to explain how the model works
- Section 16. Everything