

CS249: Midterm Outline

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Midterm: Monday April 27, 2015 !!!

Midterm on Monday April 27, 4:00-5:50pm

The Midterm will have 4 equally-weighted Questions:

- 1 Distributions and MLE
- 2 LDA, QDA, and Logistic Regression
- 3 SVD and PCA
- 4 Linear Regression

Midterm Format:

- The four questions will be mostly short answer.
- You will not be asked for any programming or pseudocode.
- The Midterm will be OPEN BOOK, OPEN NOTES.
- The Midterm will be CLOSED PHONE, CLOSED COMPUTER.

The Midterm will cover the following topics:

- 1 Distributions and MLE ([ML] 2.1 – 2.3)
- 2 Gaussians, LDA & QDA ([ML] 4.1 – 4.2)
- 3 PCA ([ML] 12.2)
- 4 Linear Regression ([ML] 7.1 – 7.3)
- 5 Logistic Regression ([ML] 8.1 – 8.3)

Texts

[ML] K.P. Murphy, *Machine Learning: A Probabilistic Perspective*, MIT Press, 2012, ISBN: 9780262018029.

[google products] [google books]

— *first 2 or 3 subsections of Chapters 2, 4, 12, 7, 8;*

No 'starred' sections in these chapters.

home page: <http://www.cs.ubc.ca/~murphyk/MLbook/>

[ISL] G. James, D. Witten, T. Hastie, R. Tibshirani, *An Introduction to Statistical Learning*, Springer-Verlag, 2013, ISBN: 9781461471387. [google products] [google books]

— *Chapters 3, 4, 10 offer tutorials/introductions for some topics*

home page: <http://www-bcf.usc.edu/~gareth/ISL/>

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