



**UNIVERSIDADE FEDERAL DE SANTA CATARINA  
CENTRO DE CIÊNCIAS FÍSICAS E MATEMÁTICAS  
PÓS-GRADUAÇÃO EM MATEMÁTICA PURA E APLICADA**

**MTM410073 Mathematical Methods for Statistics**

Pre-requisite: x-x

Weekly lesson hours: 06h

**Discipline syllabus:** Linear methods for regression. Linear methods for classification. Expansions in bases and regularization. Methods of smoothing kernels.

**BIBLIOGRAPHIC REFERENCES**

*Text book:*

1. Trevor Hastie, Robert Tibshirani, Jerome Friedman. The Elements of Statistical Learning: Data Mining, Inference and Prediction. Springer, 2009.

**COMPLEMENTARY BIBLIOGRAPHY**

1. Ethem Aplaydin. Introduction to Machine Learnin, 2nd edition, MIT press, 2010.
2. David MacKay, Information Theory, Inference, and Learning Algorithms, Cambridge University Press, Version 7.2 (fourth printing), 2005.