

Phd in Economics, University of Perugia

XXXI° Cycle

	Italiano	English
Docente/Instructor	Luca Scrucca	Luca Scrucca
Titolo/Title	MODELLI DI MISTURA PER IL CLUSTERING E LA CLASSIFICAZIONE	MIXTURE MODELS FOR MODEL BASED CLUSTERING AND CLASSIFICATION
Contenuti/Contents (18 ORE / 18 HOURS)	<ul style="list-style-type: none"> - Modelli di misture finite - Modelli mistura Gaussiani - Modelli per la cluster analisi basati sulla distribuzione Gaussiana multivariata - Algoritmo EM - Selezione del modello - Stima di densità tramite modelli mistura Gaussiani - Classificazione tramite modelli mistura Gaussiani - Il pacchetto mclust per R 	<ul style="list-style-type: none"> - Finite mixture models - Gaussian Mixture Models - Model-based clustering based on multivariate Gaussian distribution - EM algorithm - Model selection - Density estimation via finite mixture modeling - Classification using Gaussian mixture models - The R package mclust
Testi/Reading list	<p>Fraley C., Raftery A. E. (2002). Model-based clustering, discriminant analysis, and density estimation. JASA, 97(458), 611– 631.</p> <p>Fraley C., Raftery A. E., Murphy T. B., Scrucca L. (2012). MCLUST Version 4 for R: Normal Mixture Modeling for Model-Based Clustering, Classification, and Density Estimation. Tech. Rep. 597, Department of Statistics, University of Washington.</p> <p>McLachlan G., Peel D. (2000). Finite Mixture Models. New York: Wiley.</p>	<p>- Fraley C., Raftery A. E. (2002). Model-based clustering, discriminant analysis, and density estimation. JASA, 97(458), 611– 631.</p> <p>Fraley C., Raftery A. E., Murphy T. B., Scrucca L. (2012). MCLUST Version 4 for R: Normal Mixture Modeling for Model-Based Clustering, Classification, and Density Estimation. Tech. Rep. 597, Department of Statistics, University of Washington.</p> <p>McLachlan G., Peel D. (2000). Finite Mixture Models. New York: Wiley.</p>
Mese/Month*:	Febbraio	Febbraio