

# Syllabus

## *Descrizione corso*

Titolo insegnamento	Text Mining and Analysis
Codice insegnamento	28852
Titolo aggiuntivo	
Settore Scientifico-Disciplinare	NN
Lingua	Inglese
Corso di Studio	Corso di Dottorato di ricerca in Management
Altri Corsi di Studio (mutuati)	
Docenti	
Assistente	
Semestre	Secondo semestre
Anno/i di corso	1
CFU	1
Ore didattica frontale	6, Prof. Loris Gaio, unitn
Ore di laboratorio	0
Ore di studio individuale	-
Ore di ricevimento previste	
Sintesi contenuti	The course is designed for PhD students who want to learn the fundamentals of applied methods of text mining and analysis, with a straight focus on application. The course covers some broad theoretical traits of computational linguistics and focuses mainly on practical analysis processes of text mining and analysis, including some of the most frequent methods employed in this domain. Topics covered include text collection, basic techniques of text transformation and processing, syntactic and semantic analysis methods, text visualization, supervised and unsupervised classification methods.
Argomenti dell'insegnamento	During the course, some tools and software addressed to text analysis will be cited, although most applications will be developed

	using the Orange3 platform. At the end of the course, students will be able to conduct their own text analysis using a quite simple application environment. The course is suitable for PhD students enrolled in humanistic and social PhD programs who are interested in exploring theoretic fundamentals and application principles of text analysis and mining.
<b>Parole chiave</b>	
<b>Prerequisiti</b>	Fundamentals of probability theory; basic elements of computer programming; installation of Orange3 platform is required before the course starts (free software available at <a href="https://orangedatamining.com/download/">https://orangedatamining.com/download/</a> ).
<b>Insegnamenti propedeutici</b>	
<b>Modalità di insegnamento</b>	Frontal lectures, in-class discussion, exercises.
<b>Obbligo di frequenza</b>	Required
<b>Obiettivi formativi specifici e risultati di apprendimento attesi</b>	By the end of this course, students will be able to: <ul style="list-style-type: none"> <li>• Identify the relevant concepts and principles of text mining and analysis and their applications in research activities.</li> <li>• Select appropriate methods and strategies to apply text analysis to research projects requiring such kind of perspective.</li> <li>• Use tools and applications, such as Orange3, to collect, visualize, process, and analyze English texts</li> </ul>
<b>Obiettivi formativi specifici e risultati di apprendimento attesi (ulteriori info.)</b>	
<b>Modalità di esame</b>	Project work: sketch a brief proposal (max one page) for the application of text analysis on a research topic of interest; perform the analysis through an Orange3 workflow; comment results and most relevant evidence stemming from the analysis. A brief report and the Orange3 workflow must be delivered. NOTE: project works are valid for 1 academic year and cannot be carried over beyond that time-frame.
<b>Criteri di valutazione</b>	Pass or no pass
<b>Bibliografia obbligatoria</b>	Readings will be provided during the course.
<b>Bibliografia facoltativa</b>	Readings will be provided during the course.
<b>Altre informazioni</b>	

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Obiettivi di Sviluppo Sostenibile (SDGs)	
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