Syllabus

Kursbeschreibung

Titel der Lehrveranstaltung	Text Mining and Analysis
Code der Lehrveranstaltung	28852
Zusätzlicher Titel der Lehrveranstaltung	
Wissenschaftlich-disziplinärer Bereich	NN
Sprache	Englisch
Studiengang	Doktoratsstudium in Management
Andere Studiengänge (gem. Lehrveranstaltung)	
Dozenten/Dozentinnen	
Wissensch. Mitarbeiter/Mitarbeiterin	
Semester	Zweites Semester
Studienjahr/e	1
KP	1
Vorlesungsstunden	6, Prof. Loris Gaio, unitn
Laboratoriumsstunden	0
Stunden für individuelles Studium	-
Vorgesehene Sprechzeiten	
Inhaltsangabe	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.

Themen der Lehrveranstaltung	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.
Stichwörter	
Empfohlene Voraussetzungen	Fundamentals of probability theory; basic elements of computer programming; installation of Orange3 platform is required before the course starts (free software available at https://orangedatamining.com/download/).
Propädeutische Lehrveranstaltungen	
Unterrichtsform	Frontal lectures, in-class discussion, exercises.
Anwesenheitspflicht	Required
Spezifische Bildungsziele und erwartete Lernergebnisse	By the end of this course, students will be able to: • Identify the relevant concepts and principles of text mining and analysis and their applications in research activities. • Select appropriate methods and strategies to apply text analysis to research projects requiring such kind of perspective. • Use tools and applications, such as Orange3, to collect, visualize, process, and analyze English texts
Spezifisches Bildungsziel und erwartete Lernergebnisse (zusätzliche Informationen)	
Art der Prüfung	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.
Bewertungskriterien	Pass or no pass

Pflichtliteratur	Readings will be provided during the course.
Weiterführende Literatur	Readings will be provided during the course.
Weitere Informationen	
Ziele für nachhaltige Entwicklung (SDGs)	