

INSTITUTION	NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS					
SCHOOL	SCHOOL OF SCIENCE					
DEPARTMENT	INFORMATICS AND TELECOMMUNICATIONS					
COURSE LEVEL	GRADUATE					
COURSE TITLE	Text Understanding and Production Systems					
COURSE CODE	C19	Semester	3	ECTS	6	
TEACHING HOURS per week	THEORY	1.5	SEMINAR.	0	LABORATORY	1.5
URL	https://eclass.uoa.gr/courses/DI532/					

COURSE CONTENT
<p>Text Generation/Production: Present well-known / state-of-the-art techniques, algorithms, and models for generating text. Through specific use-cases it will be shown how to build systems that for example summarize texts, autocomplete sentences, compress sentences or write articles about specific topics.</p> <p>Text Understanding: Present well-known / state-of-the-art techniques, representations, algorithms, and models that are used to analyze and understand text. Some specific use-cases will be presented; e.g. news categorization, machine reading comprehension, question answering etc.</p>

STUDENT LEARNING OBJECTIVES
<ul style="list-style-type: none"> - Understand the main obstacles for building a text generation or a text understanding system - Learn the most common techniques, architectures that are used for building a text generation or a text understanding system - Learn how implement such systems

TEACHING AND LEARNING METHODS - ASSESSMENT									
TEACHING METHOD	In Class (Face to Face) or Remote - online								
USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES	Support for the learning process through the electronic platform e-class, namely: Provision of material - posting presentations and supporting material, Discussions, Announcements, Assignment-Submission of assignments. Communication via email.								
TEACHING ORGANIZATION <i>Describe in detail the way and methods of teaching:</i> Enhanced Lectures, Online Lectures, Seminars, Tutorial, Laboratory,	<table border="1"> <thead> <tr> <th>Activity</th> <th>Student Workload (hours)</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>19.5</td> </tr> <tr> <td>Laboratory</td> <td>19.5</td> </tr> <tr> <td>Teamwork in a case study</td> <td>31</td> </tr> </tbody> </table>	Activity	Student Workload (hours)	Lectures	19.5	Laboratory	19.5	Teamwork in a case study	31
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<p>Laboratory Exercise, Study & analysis of literature, Practice (Positioning), Interactive teaching, Developing a project, Individual / group work Telework (reference to tools) etc.</p> <p>Details of the student's study hours for each learning activity and hours of non-guided study are shown to ensure that the total workload at the semester corresponds to the ECTS</p>	<table border="1"> <tr> <td>Independent Study</td> <td>80</td> </tr> <tr> <td>Total Course (25 hours of workload per unit of credit)</td> <td>150</td> </tr> </table>	Independent Study	80	Total Course (25 hours of workload per unit of credit)	150					
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<p>ASSESSMENT OF STUDENTS Description of the assessment process</p> <p>Assessment Methods, Formative or Concluding, Multiple Choice Test, Quick Response Questions, Test Development Questions, Problem Solving, Written Work, Report / Report, Oral Examination, Public Presentation, Laboratory Work, Other / Other</p> <p>Fully defined evaluation criteria are mentioned and if and where they are accessible to students.</p>	<p>Describe explicitly methods, evaluation tools and provided feedback. The table below is supplemented accordingly.</p> <table border="1"> <thead> <tr> <th>Assessment methods</th> <th>Number</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Written examination</td> <td>1</td> <td>30%</td> </tr> <tr> <td>Final work</td> <td>1</td> <td>70%</td> </tr> </tbody> </table>	Assessment methods	Number	Percentage	Written examination	1	30%	Final work	1	70%
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<p>LITERATURE AND STUDY MATERIALS / READING LIST</p>
<ul style="list-style-type: none"> • Speech and Language Processing, Dan Jurafsky and James H. Martin: https://web.stanford.edu/~jurafsky/slp3/ • Reiter, E., & Dale, R. (2000). <i>Building Natural Language Generation Systems</i> (Studies in Natural Language Processing). Cambridge: Cambridge University Press. doi:10.1017/CBO9780511519857 • Allen, J. (1995). <i>Natural language understanding</i> (2nd ed.). San Francisco: The Benjamin/Cummings Publishing Company. • Publicly available research papers and articles