

MODULE OUTLINE PSAE54

1. GENERAL INFORMATION

SCHOOL	SCHOOL OF HUMANITIES		
PROGRAM COURSE	DIGITAL HUMANITIES: METHODS, TOOLS, PRACTICES (PSAE)		
LEVEL OF STUDY	POSTGRADUATE		
LAB MODULE CODE	PSAE54	SEMESTER OF STUDY	2nd
LAB MODULE TITLE	Digital tools in language processing		
INDEPENDENT TEACHING ACTIVITIES <i>in case credits are awarded for separate components/parts of the course, e.g. in lectures, laboratory exercises, etc. If credits are awarded for the entire course, give the weekly teaching hours and the total credits</i>		HOURS	CREDITS
Weekly teaching hours 21-23 hours x 13 weeks		281	10 ECTS
COURSE TYPE Compulsory, Optional, Optional mandatory	Compulsory		
PREREQUISITE MODULES:	None		
LANGUAGE OF INSTRUCTION AND EXAMS	Greek		
THE MODULE IS OFFERED TO ERASMUS STUDENTS	No		
MODULE WEBSITE (URL)	https://www.eap.gr/en/psifiakes-anthropistikes-epistimes/topics/#psae54 Each module has its own space in the Learning Management System of EAP (https://courses.eap.gr/login/index.php), with controlled access (use of code) for students and teaching staff.		

2. LEARNING OUTCOMES

Learning Outcomes <i>The course learning outcomes, specific knowledge, skills and competences of an appropriate (certain) level, which students will acquire upon successful completion of the course, are described in detail. It is necessary to consult:</i>	
Upon successful completion of this laboratory module, students will be able to: - to identify the levels of language analysis and the relevance of computer language processing for each of them, - recognise and understand the feasibility and use of computer language processing tools, - evaluate language processing methods and tools in relation to specific problems, - plan the use of appropriate digital tools to solve problems, - place language processing issues in an appropriate theoretical context.	
General Competences <i>Taking into consideration the general competences that students/graduates must acquire (as those are described in the Diploma Supplement and are mentioned below), at which of the following does the course attendance aim?</i>	
<i>Search for, analysis and synthesis of data and information by the use of appropriate technologies,</i> <i>Adapting to new situations</i>	<i>Project planning and management</i> <i>Respect for diversity and multiculturalism</i> <i>Environmental awareness</i> <i>Social, professional and ethical responsibility and</i>

<i>Decision-making</i>	<i>sensitivity to gender issues</i>
<i>Individual/Independent work</i>	<i>Critical thinking</i>
<i>Group/Team work</i>	<i>Development of free, creative and inductive thinking</i>
<i>Working in an international environment</i>	
<i>Working in an interdisciplinary environment (Other.....citizenship, spiritual freedom, social awareness, altruism etc.)</i>	<i>Introduction of innovative research</i>
• Search for, analysis and synthesis of data and information by the use of appropriate technologies, • Decision-making , • Individual/Independent work, • Group/Team work, • Working in an interdisciplinary environment, • Project planning and management, • Respect for diversity and multiculturalism, • Development of free, creative and inductive thinking.	

3. MODULE CONTENT

This Lab module discusses new digital tools for the computational processing and analysis of linguistic data, including tokenization, lemmatization, part-of-speech recognition, morphosyntactic analysis, topic identification, text categorization, automatic summarization, statistical analysis of stylometric features, text processing applications, creation of electronic dictionaries, etc. For this purpose, the first part of the module introduces natural language processing (basic concepts, levels of language analysis, problems) and analyses issues of morphological, syntactic and semantic analysis, for which the main applications and related computational tools are presented. In the second part of the module, specific issues of language processing through digital tools such as naming entity recognition and extraction, sentiment and attitude analysis, automatic translation/interpretation, electronic lexicography, etc. are developed and the relevant tools and their theoretical and practical implications are discussed.
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4. TEACHING METHODS--ASSESSMENT

MODES OF DELIVERY <i>Face-to-face, in-class lecturing, distance teaching and distance learning etc.</i>	Distance education with three Group Counseling Meetings (OSS) during the academic semester, held on weekends.	
USE OF INFORMATION AND COMMUNICATION TECHNOLOGY <i>Use of ICT in teaching, Laboratory Education, Communication with students</i>	We use : Remote meetings tools (cisco webex), Presentation software (e.g. power point), Additionally, the students use office automation tools, web browsers and e-reader for digital books.	
MODULE DESIGN <i>Description of teaching techniques, practices and methods: Lectures, seminars, laboratory practice, fieldwork, study and analysis of</i>		
	Activity	Semester Workload
	3 OSS (x 4 hours)	12

<i>bibliography, tutorials, Internship, Art Workshop, Interactive teaching, Educational visits, projects, Essay writing, Artistic creativity, etc</i> <i>The study hours for each learning activity as well as the hours of selfdirected study are given following the principles of the ECTS.</i>	4 tutorial exercises (4 x 20 hours)	48
	1 semester assignment	50
	Examination	2
	Individual study (13 hours x 13 weeks)	169
	Total module workload (hours)	281
STUDENT PERFORMANCE EVALUATION/ASSESSMENT METHODS <i>Detailed description of the evaluation procedures.</i> <i>Language of evaluation, assessment methods, formative or summative (conclusive), multiple choice tests, short- answer questions, open-ended questions, problem solving, written work, essay/report, oral exam, presentation, laboratory work, other.....etc.</i> <i>Specifically defined evaluation criteria are stated, as well as if and where they are accessible by the students</i>	Completion of written assignments during the academic semester which constitute a 40 percent of each student's grade, if a pass is obtained in the final or repetitive examination. Final oral exam grades constitute a 60 percent of the students' final course grade. For further information go to the <u>EAP Study Guide</u> .	

5. SUGGESTED BIBLIOGRAPHY

- Suggested bibliography:

Fox, B., Jurafsky, D. & Michaelis. L. (eds) (1999). *Cognition and Function in Language*. Stanford, CA: CSLI Publications.

Granger, S. & Paquot, M. (eds) (2012). *Electronic Lexicography*. Oxford: Oxford University Press.

Jurafsky, D. & Martin, J. H. (2008). *Speech and Language Processing: An Introduction to Natural Language Processing, Speech Recognition, and Computational Linguistics* (2nd ed.). New York: Prentice Hall.

Manning C. & Schütze, H. (1999). *Foundations of Statistical Natural Language Processing*. Cambridge, MA: MIT Press.

Mitkov, R. (2014). *The Oxford Handbook of Computational Linguistics*. Oxford: Oxford University Press.

Μικρός, Γ. (2015). Υπολογιστική υφολογία. Αθήνα: Σύνδεσμος Ελληνικών Ακαδημαϊκών Βιβλιοθηκών. Διαθέσιμο στο: <http://hdl.handle.net/11419/4860>

Φραντζή, Κ. (2012). *Εισαγωγή στην επεξεργασία σωμάτων κειμένων*. Αθήνα: Ίων.

-Related scientific Journals:

Applied Corpus Linguistics, <https://www.sciencedirect.com/journal/applied-corpus-linguistics>.

Computational Linguistics, MIT Press, <https://direct.mit.edu/coli>.

Corpora, Edinburgh University Press, <https://www.euppublishing.com/loi/cor>.

Corpus Linguistics and Linguistic Theory, De Gruyter, <https://www.degruyter.com/journal/key/cllt/html>.

Digital humanities quarterly DHQ. Association for Computers and the Humanities (ACH) and the Alliance of Digital Humanities Organizations (ADHO), <https://www.digitalhumanities.org/dhq>.

Digital Scholarship in the Humanities. Oxford University Press, <https://academic.oup.com/dsh>.

Digital Studies / Le champ numérique. Alliance of Digital Humanities Organisations under the direction of the Canadian Society for Digital Humanities/Société canadienne des humanités numériques (CSDH/SCHN) by the Open Library of the Humanities, <https://www.digitalstudies.org>.

Interdisciplinary Digital Engagement in Arts & Humanities (IDEAH), Canadian Social Knowledge Institute, <https://ideah.pubpub.org>.

International Journal of Corpus Linguistics, John Benjamins, <https://benjamins.com/catalog/ijcl>.

International Journal of Digital Humanities. Springer, <https://www.springer.com/journal/42803>.

Journal of Data Mining & Digital Humanities, <https://jdm.dh.episciences.org>.

Natural Language Processing Journal, <https://www.sciencedirect.com/journal/natural-language-processing-journal>.

Research in Corpus Linguistics, Spanish Association for Corpus Linguistics AELINCO, https://ricl.aelinco.es/index.php/ricl/the_journal.