

COMPUTER TOOLS AND LINGUISTIC APLICATIONS

Coordination: VÁZQUEZ GARCÍA, MARIA GLÒRIA

Academic year 2021-22

Subject's general information

Subject name	COMPUTER TOOLS AND LINGUISTIC APLICATIONS					
Code	101259					
Semester	2nd Q(SEMESTE	2nd Q(SEMESTER) CONTINUED EVALUATION				
Typology	Degree		Course	Character	Modality	
	Bachelor's De Studies	egree in English	1	COMMON	Attendance- based	
	Double degree: Bachelor's degree in English Studies and Bachelor's degree in Applied Languages and Translation		1	COMMON	Attendance- based	
Course number of credits (ECTS)	6					
Type of activity, credits, and groups	Activity type	PRAULA		TEORIA		
	Number of credits	4		2		
	Number of groups	1		1		
Coordination	VÁZQUEZ GARC	ÍA, MARIA GLÒRIA				
Department	ENGLISH AND LI	NGUISTICS				
Teaching load distribution between lectures and independent student work	See Methodology					
Important information on data processing	Consult this link for more information.					
Language	Spanish: 50%; Catalan: 50%					
Distribution of credits	4 practice 2 theory					

Teaching staff		Credits taught by teacher	Office and hour of attention
VÁZQUEZ GARCÍA, MARIA GLÒRIA	gloria.vazquez@udl.cat	6	Monday from 11 to 13

Subject's extra information

In this subject students are expected to achieve a good command of the most commonly used computer tools for bibliographic management, text editing and communication and correct corpus exploitation by linguistic and literary studies.

Learning objectives

- Formalize linguistic phenomena at the morphological and syntactic levels.
- Use, analyze and evaluate resources and applications related to language technologies (corpus, proofreaders and translators).
- Use at different levels of use basic tools in editing and managing data for research in linguistics and literature (such as word processors, spreadsheets, databases and bibliographic managers).

Competences

CG12 Plan and organize academic work

CG14 Use specialized ICTs for the scientific study of the English language as well as its literatures and cultures

CG15 Search and manage information and use diverse sources and documentation

CE4 Define the systematic aspects of the uses of the English language from different perspectives of analysis: phonetic, phonological, lexical, morphological, semantic, syntactic, discursive, pragmatic, stylistic and sociolinguistic.

CE8 Perform basic tasks within a group of linguistic and literary investigations

Subject contents

- I. Computer tools for digitized presentations
- 1. Exploiting the utilities of word processors
- 1.1 Introduction: document submissions
- 1.2 Formatting Issues
- 1.3 Linguistic Correction
- 1.4 Images, sound, columns, tables, flowcharts
- 1.5 Numbering of pages and lines
- 1.6 Creating indexes
- 1.7. Collaborative work

- 1.8 Creating secure electronic publishing files
- 1.9 Other useful tools
- 2. Bibliographic management
- 2.1 Introduction: plagiarism and copyright
- 2.2 Bibliographic search tools
- 2.3 Textual and non-textual citations
- 2.4 Format of the different bibliographic references
- 2.5 References to digital material
- 2.6 Automatic bibliographic editing tools
- 3. Creating digital slides
- 3.1 Introduction: the schematic presentations of contents
- 3.2 Basic Software Utilities
- 3.3 Slide Patterns
- 3.4 Layout and animation of slides
- 3.5 Language Correction
- II. Computerized linguistic tools and resources
- 4. Electronic language resources
- 4.1 Introduction: language technologies
- 4.2 Lexical resources
- 4.3 Morphological analyzers, generators and disambiguators
- 4.4 Grammar Analyzers
- 4.5 Automatic and Assisted Translation
- 5. Assisted text correction
- 5.1 Introduction: the causes of errors and the usefulness of correctors
- 5.2 The characterization of errors
- 5.3 Spelling and typographical correctors
- 5.4 Grammar Correctors
- 5.5 Stylistic correctors

- III. Computer tools for linguistic and literary analysis
- 6. Consultation and exploitation of corpus
- 6.1 Introduction: what is a corpus?
- 6.2 Criteria for the design of corpus
- 6.3 Corpus processing and annotation
- 6.4 Queries on the corpus
- 6.5 The use of corpus in different areas
- 6.6 Examples of corpus
- 7. Using databases and spreadsheets
- 7.1 Introduction: computer tools at the service of linguistics
- 7.2 Creating and Editing Worksheets
- 7.3 Numerical operations with spreadsheets
- 7.4. Field and record concepts
- 7.5 The creation of forms for the use of databases
- 7.6 Querying databases
- 7.7 Exporting data
- 7.8 Printing the files

Methodology

Table of training activities and time dedications of the student

Mixed system: combination of face-to-face classes and on-line contact and resources.

HP (horas presenciales): student's face-to-face hours.

HNP (horas no presenciales): non student's face-to-face hours (autonomous work)

TOTAL HOURS OF STUDENT DEDICATION	150 h (6 ECTS X 25h)	Contact Hours with teacher 60	Autonomous work HNP2 90
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Contact hours with teacher: 60

TRAINING ACTIVITY (class or videoconference)	DESCRIPTION	HP+HNP1
Master class	For each topic there will be an oral explanation	20
Practice	Bibliographic management and editing Digitized support tools for an academic presentation Basic word processing tools and resources in Natural Language Processing: lexical databases, morphological analyzers, disambiguators, parsers Machine translation tools Automatic correction tools Exploitation of corpora and representation of data	40

Autonomous work: 90 (*)

TRAINING ACTIVITY	DESCRIPTION	HNP2
Short activities	Response to challenges posed by teachers Statement of difficulties during the learning process	5
Bibliographic Reading and watching videos	Readings, understanding and comprehension of the teaching material prepared by the teacher Readings from other documentary sources Watching and understanding videos	20
Essays	A: Digitized support for an academic presentation B: Evaluation of an automatic correction tool C: Exploitation of corpora and representation of data	25 20 20

(*) For some of these HNPs2, **flipped class methodologies** will be applied with an impact on the assessment. The aim is to reward the student who invests time dedicating HNP to it and who can certify it to the teacher with the presentation of the work entrusted punctually to work at home.

Development plan

DEVELOPMENT PLAN

• 2.13 ROOM

• COMPUTER SCIENCE ROOM (3RD FLOOR)- ROOM 3.49 AND 3.48

M: master class; P: practice; U: unit; A: activity

Week		Monday		Tuesday	
		Activity	Contents	Activity	Contents
1	7-8 / 2	M, P	T1	M, P	T1
2	14-15/2	M, P	T1	M, P	T1
3	21-22/2	M, P	T2/T3	M, P	T2
4	28/2-1/3	M, P	T2/T3	Р	T2

5	7-8/3	Р	T2/T3	M, P	T4	
6	14-15/3	M, P	T4	M, P Presentation A1	T4	
7	21-22/3	Р	T4	M, P	T4/T5	
8	28-29/3	M, P	T5	M, P Exam T4	T5	
9	4-5/4	M, P	T5	Р	T5	
10	19/4	HOLIDAY		Р	T5	
11	25-26/4	Р	T5	M, P Exam T5	T6	
12	2-3/5	M, P	T6	M, P Presentation A2	T6	Evaluation
13	9-10/5	FESTA		Р	Т6	Official exams 1a and 2a CALLS:
14	16-17/5	Р	T6	Р	Т6	students will not
15	23-24/5	Р	T6	P Exam T6	Т7	use any of these dates for exam, since this subject
		Presentation A	A 4			is evaluated from the activities and

the tests (tests) made during the course (see the Development Plan).

EVALUATION MECHANISM	DESCRIPTION	%
Exams	Units 4, 5 and 6	15
Activities (*)	 A1 - Elaboration of the digitized support of an academic presentation A2 - Analysis of a verifier and automatic corrector A3 - Search with different parameters in a corpus and representation of the data 	30 20 20
Class participation	Problem solving and classroom development	15
TOTAL		100

(*) The tasks carried out during the HNP using the methodology of the inverse classroom (vg. Methodological Axes) can get to raise the note obtained of the activities.

FORMAL ASPECTS CONCERNING PRESENTATION OF ACTIVITIES:

Spelling and expression (syntactic structures, punctuation, linking of ideas) have to be painstaking. The formal presentation (margins, spacing between paragraphs) must be correct. The following minimums are required:

• Initial sheet with name: student's name, teacher's name, subject name, title name, title and numerical reference of the activity

Line spacing: 1.5Measure letter: 12

If the teacher considers that the spelling, expression or formal presentation are neglected, he may consider not

correcting the activity and suspending it for this reason. You will not be allowed to resubmit a suspended activity for reassessment.

Cases of plagiarism:

Any activity or evaluation test that includes evidence of plagiarism or fraudulent action will be rated 0.

The student who submits an evaluation test of dubious authorship must take a similar test in the presence of the teacher. In the event that the result proves a different level from that shown in the first activity delivered, or substantial differences in performance, the teacher may decide to apply the grade of the second activity or any other grade that includes a penalty for fraudulent action of the student.

<u>Alternative assessment:</u> Students who combine their degree with a full time job or a part-time job with schedules coinciding with classes have the right to ask for alternative assessment within 5 days after the beginning of the semester. For information, please send an e-mail to <u>lletres.secretariacentre@udl.cat</u> or ask for information at the Faculty's office(Secretaria de la Facultat de Lletres).

Bibliography

<u>IMPORTANT NOTE:</u> If you consult the Library tag of the left menu of the subject in the Virtual Campus (link "Recommended bibliography"), you will directly access the tab of each document within the Library catalog, and thus you will know where to find it and if it is available.

Document reference	Access	Contents
Barnbrook, Geoff (1996). Language and computers. Edimburgo: Edinburgh University Press.	Biblioteca Lletres UdL	Т6
Com citar i elaborar bibliografies. 2016. Universitat de Lleida.	http://biblioguies.udl.cat/citar	Т3
Fernández, A.; G. Vázquez (2010). "Tecnologies del llenguatge". Antoni Oliver (ed.), Llengua catalana i tecnologies digitals. Barcelona:UOC, p. 1-30	Biblioteca Lletres UdL	T1
Gómez Guinovart, Javier (1999). La escritura asistida por ordenador: problemas de sintaxis y de estilo. Vigo: Universidad de Vigo (Servicio de Publicacións).	Biblioteca Cappont UdL	Т5
Manuals of the software used along the course	Software Aula d'Informàtica de Lletres	Tot
Mestres, Josep M. et al. (1995). Manual d'estil. Barcelona: Eumo, UB, UPF, Ass. Mestres Rosa Sensat.	Biblioteca Lletres, C. Salut, ETSEA and Cappont UdL	Т3

Moreno Sandoval, Antonio (1998). Lingüística computacional: introducción a los modelos simbólicos, estadísticos y biológicos. Madrid: Síntesis.	Biblioteca Lletres UdL	T4, T6
Oliver, Antoni (2016). Herramientas informáticas para traductores. Editorial UOC	https://elibro.net/es/lc/udl/titulos/58451	T4
Oliver, Antoni i Joaquim Moré (2007). Traducció i tecnologies. Editorial UOC	Biblioteca Lletres UdL	T4, T5, T6
Tordera, Juan Carlos (2011). Lingüística computacional. Análisis, generación y traduccion automática. Universitat de València	Resources	Т4