

Computational Linguistics Course Specifications

Faculty: Computer and Informatics

Department: Scientific Computing

Program(s) on which the course is given : Bachelor in Computer and Information Sciences
Major or Minor element of programs : All majors
Department offering the program : Scientific Computing
Department offering the course : Basic Sciences
Academic year / Level : 1st Year / B.Sc.
Date of specification approval : 18/10/2009

A. Basic Information

Title: Computational Linguistics **Code:** HUM 113

Lectures: 2 hrs/week **Tutorial:** --- **Practical:** ---

Credit Hours: --- **Total:** 2 hrs/week

B. Professional Information

1. Overall Aims of Course:

This course aims to introduce the concepts and techniques used in processing speech and text by computers.

2. Intended Learning Outcomes of Course (ILOs):

a. Knowledge and Understanding:

This course helping student acquire:

- a1- The related concepts and terms related to computer in bath languages Arabic and English.

- a2- Demonstrating the relationship between the Arabic language and computer and contrasting it with English.
- a3- Determining ways and levels of improving the Arabic language through computer.
- a4- Give an account on speaking and written style.

b. Intellectual Skills:

- b1- Training students on various types of thinking.
- b2- Raising the student's awareness of the importance of mastering the Arabic language skills especially speaking and writing.
- b3- Forming and developing positive attitudes towards using the Arabic language religiously, nationally and officially.
- b4- Providing students with the reasons and requirements of teaching Arabic language to none specialized.

c. Professional and Practical Skills:

Training students on:

- c1- Rules and bases of using the Arabic language on computer.
- c2- Using punctuation marks in writing in Arabic on computer.
- c3- How to overcome the common errors "structure, dictation, handwriting" of writing in Arabic on computer as well as by hands.
- c4- Pronouncing Arabic in speaking as well as loud reading.
- c5- Training students on writing in the Arabic language correctly through computer.

d. General and Transferable Skills:

- d1- Manipulate and express ideas in writing.
- d2- Discuss and solve problems.
- d3- Defend and evaluate alternatives.
- d4- Manage tasks and resources.
- d5- Search for information and adopt life-long self-learning.
- d6- Work in stressful environment and within constraints.
- d7- Communicate effectively through oral presentations, computer presentations and written reports.

e. Attitude:

- e1- A knowledge and respect of ethics and ethical standards in relation to a major area of study.
- e2- Relationship Emphasis a successful with other students.
- e3- Learn how to make relation with other, and the limit of this relation.
- e4- Know the culture of other peoples.

3. Contents:

Topic	No. of hours	Lecture	Tutorial/P ractical
1- The importance of Arabic and reasons for teaching it to everyone on the religious, national and official levels.	2	1	-
2- The basic terms and concepts of computer in Arabic as well as English language	2	1	-
3- The relationship of the Arabic language and computer and its development	4	2	-
4- Levels of improving Arabic through computer	2	1	-
5- The basic principles and rules of the correct linguistics performance :			
a- Grammar rules.	4	2	-
b- Phonological rules.	2	1	-
c- Phonetically rules.	2	1	-
d- Dictation rules.	4	2	-
e- Punctuation marks.	2	1	-