Course Name	NATURAL LANGUAGE PROCESSING	Course Code	COMP 545		
Credit Hours	2	Contact Hours	Theory	Lab	Total
			2	-	2
Offered as	☐ University Requirement ☐ College Requirement ☒ Program Requirement ☐ Core ☒ Elective ☐ ITEC ☒ COMP ☐ CNET				
Level	10	Prerequisite	COMP 441		

Course Description:

This course will cover the foundations of natural language processing (NLP) from textual content processing to corpus understanding. The course covers POS Tagger to understand the sentence structure to solve related issues like ambiguity. It is designed for develop the syntactic and semantic concepts of NLP and introduce the computational techniques for analyzing and understanding textual content. In addition to foundations, the course will also introduce significant application areas of NLP such as information extraction, machine translation, and question-answering/conversational agents. A strong programming background is required for the course.

Course objectives:

- To introduce the fundamental concepts and techniques in textual natural language processing and models
- To explain basics of POS tagging
- To illustrate the method to extract semantic and syntactic structure from text
- To provide experience in the implementation and evaluation of NLP algorithms
- To introduce NLP resources and application areas

Grading						
	☒ **Exam 1**	**10%**	☒ **Exam 2**	**10%**	☒ **Assignment(s)**	**20%**
	☒ **Final**	**40%**	☒ **Lab**	**20%**	☐ **Mini Project**	

Text Book:

- Speech and Language Processing, 3rd Edition, Jurafsky and Martin, Stanford University, https://web.stanford.edu/~jurafsky/slp3/, 2018.

References:

- Natural Language Processing with Python, Bird and Klein, O'Reilly Media, 2009. ISBN : 978-0-596-51649-9