

Course Type	Course Code	Name of the Course	L	T	P	Credits
DP	NHSC511	Natural Language Processing Lab	0	0	3	1.5

Course Objective
<p>The students</p> <ul style="list-style-type: none"> • receive theoretical foundation and hands-on experience in Natural Language Processing for humanities and social science enquiry. • develop practical knowledge of the application of NLP and develop various skill sets of data processing within NLP.
Learning Outcomes
<p>Upon successful completion of this course, the students will be</p> <ul style="list-style-type: none"> • familiar with the basics of NLP • gained insights into concepts and principles of NLP. • able to evaluate data sources and analyse them within the NLP paradigm. • able to build, apply and modify existing modules for linguistic analysis.

Unit No.	Topics to be Covered	Lecture Hours	Learning Outcome
1.	Introduction to NLP, its concepts and corpus	6	Introducing students to NLP and the basic concepts in the Processing
2.	Computation: Phonetics and and morphology	8	Students would learn the application of phonetics and morphology
3	Computation: Syntax	6	Students would acquire knowledge in the use of syntax
4	Computation: Semantic	9	Students would acquire knowledge in the use of semantic analysis
5.	Automatic Documentation and Automatic Discourse Analysis	7	Students would obtain knowledge in the automatic documentation and discourse analysis
6.	Advanced topics in NLP	6	Students would be introduced and taught the advanced topics in NLP
TOTAL LECTURE HOURS		42	

Textbook:

1. Bird, Steven, Edward Loper and Ewan Klein (2019), Natural Language Processing with Python (Updated online edition). www.nltk.org.
2. Mattingly, William.(2021). Introduction to spaCy 3 (1st ed.). spacy.pythonhumanities.com.

Reference Books:

1. Fang, Chengyu Alex, and Jing Cao. Text genres and registers: The computation of linguistic features. Springer, 2015.