

**Place:** Room 107, New Building      **Time:** 14:00-17:00 on Thursday

**Chair:** Dr. Hen-Hsen Huang

**Outline:** This course first goes through the common background required in studying various NLP and IR techniques. Afterwards, algorithms for performing IR and NLP are introduced, and their associated applications then follow each of them respectively. Last, this course is concluded with some selected topics on social networks and deep learning for NLP.

**Office hours:** by appointment

**Grades:** Exam 40% Class 10% Project 50%

Week	Date	Topics/Brief Description	Lecturers
1	2025/02/20	Course Introduction and Overview of NLP/IR	Hen-Hsen Huang
2	2025/02/27	Basic Text Processing	Hen-Hsen Huang
3	2025/03/06	Transformer	Wei-Yun Ma
4	2025/03/13	N-gram Language Modeling	Hsin-Min Wang
5	2025/03/20	Text Classification and Clustering	
6	2025/03/27	Introduction to Spoken Language Processing	
7	2025/04/03	Spring Break_No Class	-----
8	2025/04/10 13:00-16:00	IE & IR Modeling	Lun-Wei Ku
9	2025/04/17 13:00-16:00	Evaluation, Relevance Feedback, Query Expansion & Final Project Proposal	Lun-Wei Ku
10	2025/04/24 13:00-16:00	Sentiment Analysis and Opinion Mining	Lun-Wei Ku
11	2025/05/01	Exam	-----
12	2025/05/08	Discourse Analysis with LLMs	Hen-Hsen Huang
13	2025/05/15	NLP in Healthcare	Hen-Hsen Huang
14	2025/05/22	Large Language Model	Wei-Yun Ma
15	2025/05/29	Retrieval-Augmented Generation	Wei-Yun Ma
16	2025/06/05 13:00-16:00	Project Demo	Lun-Wei Ku