

[수업기본정보]

년도/학기	2023/1학기	교과목명	빅데이터	교과목번호/강좌번호	810020/31001
이수구분	전선	학점	3	강의시간	목(1 ~ 4)

[담당교수정보]

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[강의계획]

과목개요	In this lecture, theory and practice are studied with the aim of understanding the concept and practical use of big data. This lecture can be largely divided into two topics. First, statistical analysis theory and practice for big data analysis. Second, we will develop natural language processing applications using massive text data. In this lecture, a model for predicting stock prices by collecting structured data and news data is created. Through this, actual data analysis practice and application implementation ability are developed.
교육목표	The goal of this lecture is to learn what big data is and how to use it. Based on the lecture, actual data analysis practice and application implementation ability will be improved.
학습성과관련도 (L3=상) (L2=중) (L1=하)	
교재 및 참고서적	Basically, the lecture slides will be provided thus, no need to buy the textbook. In Weeks 2-4 of the lecture, we will be using the "누구나 파이썬 통계분석" but you don't need to buy it.
활용 기자재	No need to have a personal laptop for this class. You can use a desktop equipped in the lecture room. But just for the final project, we recommend one of the members has a laptop.
성적평가방법	팀 프로젝트로 기말고사 시험을 대체할 예정입니다. 하지만, 필요시 공정한 평가를 위해 팀프로젝트 대신 기말고사로 대체될 수도 있습니다. 이점 꼭 유의부탁드립니다! A team project replace the final exam. However, if necessary, it may be replaced with a final exam instead of a team project for a fair evaluation. Please note that!

[주별강의계획]

주차	내용	비고
1	Introduction of the course A quick recap of Numpy, Pandas	
2	Statistical Analysis for 1-dimensional Data	
3	Statistical Analysis for 2-dimensional Data	
4	Discrete probability variable	
5	Machine Learning with Pytorch	
6	Deep Learning with Pytorch	
7	Data Crawling	
8	Midterm	
9	Recurrent Neural Network 1	
10	Recurrent Neural Network 2	
11	Data Representation (Word Representation)	
12	Sequence to Sequence 1	
13	Sequence to Sequence 2	
14	Titanic Exploratory Data Analysis	
15	Final term exam (or Team Project Presentation)	
16		

