<<Last Updated:2022/02/28>>

Course Schedule Information

Course Code	331636
Semester	Spring and Summer Term
Day and Period	Tue4
Course Name (Japanese)	ビッグデータ解析
Room	Graduate School of Information Science and Technology/A110
Course Name	Big Data Analytics
Capacity	0
Course Numbering Code	33BIEN5M005,33INPS5M005,33COSC5M005,33INSE5M005,33INNE5M005,33MUEN5M005
Credits	2.0
Student Year	1,2
Instructor	ONIZUKA Makoto,XIAO Chuan
Course of Media Class	Not Applicable

※About Course of Media Class
"Course of Media Class" are classes in which more than half of the classes are held in places other than classrooms by making advanced use of various media.
Undergraduate students can include up to 60 credits in media class course as requirements for graduation.
Even if this is not the case, we may hold classes using the media.

Detailed Syllabus Information

Course Subtitle	Big Data Analytics
Language of the Course	English
Type of Class	Lecture Subject
Course Objective	We study the core techniques of big data analytics including data cleaning, data warehousing, association rule mining, classification, clustering, outlier detection, recommendation, and analysis of various data types such as graph and time series.
Learning Goals	The objective of this course is to study fundamental techniques for big data analytics and obtain how they are applied to practical problems in real world.
Requirement / Prerequisite	Fundamental algorithms, data structures, and programming skills. Database skills are not mandatory but recommended.
Class Plan	1. Trend of Big Data analytics and applications (1) 2. Trend of Big Data analytics and applications (2) 3. Data Warehousing and Online Analytical Processing 4. Mining Frequent Patterns, Associations, and Correlations: Basic Concepts and Methods 5. Advanced Pattern Mining 6. Cluster Analysis: Basic Concepts and Methods 7. Advanced Cluster Analysis 8. Classification 9. Advanced Classification (1) 10. Advanced Classification (2) 11. Graph mining 12. Advanced Graph mining (1) 13. Advanced Graph mining (2) 14. Outlier Detection 15. Recommendation
Independent Study Outside of Class	Assignment for each lecture.
Textbooks	Slides are available on CLE.

Reference	Data Mining. Concepts and Techniques, 3rd Edition https://drive.google.com/file/d/1HC3M81bmmW6rBOx19nQx6aQBgQph7_Tm/view?usp=sharing
Grading Policy	The grade is determined based on the report score.
Attendance and Student Conduct Policy*	
Other Remarks	We may ask the students to bring PCs to the lectures.
Special Note	Please contact Chuan Xiao (chuanx@ist.osaka-u.ac.jp) if you have any questions.
Office Hour	
Messages to Prospective Students	

Cautions for Students