

Cluster	Subject Title	Instructor	Credit	Semester
K-P	SAS for big data analysis	Charles Tzu-Chi Lee	2	Winter 2019
Subject Description				
<p>Due to advanced computer technology in recent years, electronic data accumulate rapidly in a huge amount of volume, resulting in a number of large databases. These databases store a lot of information and the scientific knowledge depends on appropriate data management techniques and statistical methods to analyze them. This course will introduce to use of SAS statistical software to do data mining for large databases. The simulated database will be used to do exercises.</p>				
Objective				
<p>After the class, students will successfully</p> <ol style="list-style-type: none"> (1) Understanding the analysis procedure of big data (2) Understanding basic SAS programming for big data input, output, modifying and analysis. 				
Learning Method				
<p>In this course, we will study SAS big data analysis programs. Teacher will provide his SAS programs to students. Therefore, for new user, they can use these programs to do big data analysis following teacher's practices.</p>				
Content				
<ol style="list-style-type: none"> (1) Introduction of big data analysis (2) SAS data management (3) SAS macro and array statement (4) SAS SQL statement (5) Prepare analysis data from big data by SAS (6) SAS procedure for regression methods (7) Examination 				
Requirement				
<p>At least one statistics course experience is necessary. Basic SAS programming experience is helpful but not necessary.</p>				
Evaluation				
<p>Examination on a study project's analysis.</p>				
Textbook and reference (please indicate which are to be provided by instructor and which students need to find by themselves)				
Nil.				
Pre-course reading and preparation (if any)				
Nil.				