

ISOM 2600: Introduction to Business Analytics

FALL , 2021

Department of Information Systems,
Business Statistics and Operation Management

Instructor: Prof. Xuhu Wan, LSK Building, Room 4072, Ext.7731, imwan@ust.hk.

Tutor:

Class meets:

Course Description

Main Contents:

- This course introduces basic and modern analytical concepts and methods for the business practice. It covers statistical tools in descriptive analytics and predictive analytics, including exploratory data analysis, statistical inference, linear regression and clustering. This course provides students with the fundamental concepts and tools needed to understand the emerging role of business analytics in organizations and shows students how to apply basic business analytics tools with python and interpret analytic models and results for making better business decision.

Objectives:

- To gain basic skill in Pandas and data processing.
- To gain deeper understanding of statistical concepts with python simulation.
- To select and apply appropriate statistical models in the analysis of quantitative and qualitative data from a variety of business scenarios.

Course Materials

- A. Reference textbook: “Python Data Science Handbook” authored by Jake Vanderplas ;
- B. Class notes and exercise questions are downloadable from course website (<http://canvas.ust.hk/>);
- C. You need to learn how to use Pandas to deal data processing and to build regression and clustering models. Please attend lectures regularly in order to learn these more effectively. All the concepts will be demonstrated with Jupyter notebook in the lecture.

Evaluation

Your overall grade will be based on the following:

- A. 1 assignment (30% .): Students need to work individually.
- B. Final Exam(60%) (All MC questions)
- C. Attendance(10%): Students are strongly encouraged to attend the lecture regularly for the good understanding of concepts with the help of Python. You will be asked to try all kinds of pandas skills during the lecture. Attendance of the tutorials are not compulsory. However, tutors will help you with pandas and statistical modeling in more details.

Course Organization

- Topic 1: Pandas and data processing
- Topic 2: Exploratory data analysis
- Topic 3: Statistical inference
- Topic 4: Application of regression in business analysis

- Topic 5: Identification of business pattern with clustering

Final Exam

Grievance Procedure

If you disagree with grades that have been assigned to your work, you have the possibility to meet instructors within one week after the grades have been published on the course website. Be specific about what it is that you don't agree with.

Academic Integrity

Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating of information facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of other groups, or tampering with the academic work of other groups. All exam answers must be your own, and you must not provide any assistance to other students during exams.