COURSE DETAIL

FOUNDATIONS OF DATA SCIENCE

Country
China

Host Institution
Fudan University

Program(s)
Shanghai Summer

UCEAP Course Level
Lower Division

UCEAP Subject Area(s)
Computer Science

UCEAP Course Number
17

UCEAP Course Suffix
S

UCEAP Official Title
FOUNDATIONS OF DATA SCIENCE

UCEAP Transcript Title
DATA SCIENCE

UCEAP Quarter Units
4.00

UCEAP Semester Units

2.70

Course Description
This course focuses on the fundamentals of data science and provides an introduction to some basic machine learning algorithms. It explores data in a scientific way and explains the importance of data analysis. The course adopts a breadth-first approach to provide a big picture of data science. Specific topics include the basics of programming data analysis code in Python; important statistics concepts such as sampling, hypothesis testing, and confidence intervals; experimental design to gather data; and appropriate classification and inference tools to analyze data. Text: Ani Adhikari and John DeNero, COMPUTATIONAL AND INFERENTIAL THINKING-THE FOUNDATIONS OF DATA SCIENCE Assessment: lecture participation points (5%), labs (60%), final exam (35%).

Language(s) of Instruction
English

Host Institution Course Number
ECON170017

Host Institution Course Title
FOUNDATIONS OF DATA SCIENCE

Host Institution Campus
International Summer School

Host Institution Faculty

Host Institution Degree

Host Institution Department
Science & Technology

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