COURSE DETAIL

QUANTITATIVE RESEARCH METHODS
Country Netherlands
Host Institution Leiden University College
Program(s) Leiden University College
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Statistics
UCEAP Course Number 100
UCEAP Course Suffix
UCEAP Official Title QUANTITATIVE RESEARCH METHODS
UCEAP Transcript Title QUANT RESRCH MTHDS
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description

Today's world relies much on the accumulation, presentation, and interpretation of large quantities of information. Statistics is a tool that enables us to organize our data in an efficient manner, and provides us with methods that help us understand the relationships that occur in our data and our increasingly complex world. This course draws on examples from multiple disciplines, such as political science, economics, medical sciences, and biology to demonstrate how to search for and evaluate patterns in large amounts of data, as well as to interpret what these patterns tell us about the world. The material in this course covers data display, statistical inference, regression and experimental design. The course primarily focuses on developing substantive and precise understanding of the various quantitative research designs and corresponding statistical methods. Students develop individual projects, applying their knowledge to real-world problems using elementary computer programming in the R statistical programming package. This course is designed to be accessible for students at all levels of mathematical skill. The focus is on developing conceptual understanding of statistics without heavy reliance on rigorous mathematical background. The knowledge obtained from this course should provide solid background for students who wish to continue their statistical education with more advanced courses as well as prepare students to perform their own statistical analyses in their coursework and beyond. Upon completion the course aims to provide the students with the following skills: apply scientific research process, including theory formulation and hypothesis testing; critically analyze various types of data and learn to select most appropriate elementary statistical technique to answer their research question; use statistical programming to enter data, generate descriptive statistics and graphs, and estimate basic statistical models; communicate and present statistical results to a variety of audiences – academic experts and policy-makers.

Language(s) of Instruction

English

Host Institution Course Number

8002GED19Y

Host Institution Course Title QUANTITATIVE RESEARCH METHODS
Host Institution Course Details
Host Institution Campus Leiden University College, The Hague
Host Institution Faculty
Host Institution Degree
Host Institution Department Various Departments
Course Last Reviewed

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