UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Big Data in Behavioural Psychology

2324-2-FDS01Q027-FDS01Q032M

Aims

The Data Scientist often works in a multidisciplinary environment, interacting with experts from various fields, including psychology. This course aims to provide a general overview of some basic concepts, methods, and theories of psychology, with the goal of facilitating multidisciplinary interaction. Students will delve into the methods, tools, and theories within psychology that can be augmented and enhanced through the use of Big Data analytics.

Contents

The course will cover various aspects of behavioral prediction, attitudes, identity, language bias, and the prediction of psychological states and traits. Practical applications such as persuasion and psychological targeting will also be discussed.

Detailed program

Introduction to Big Data in Behavioral Psychology

- Overview of the course
- Review of traditional psychological methods
  Predicting Behaviors
- In-depth exploration of behavior prediction theories: Theory of Reasoned Action and Theory of Planned Behavior
- Practical applications and case studies
  Attitudes: Theoretical Models and Measurements (3 hours)
- Understanding attitudes and their measurement

- Application of reflective and impulsive models
  Identity and Social Identity (3 hours)
- Exploration of identity concepts
- Analysis of social identity in psychology
  Language Bias
- Examination of language biases in psychological research
- Strategies to detect language bias
  Predicting Psychological States and Traits
- Theoretical models of personality and case studies examples
  Personal values
- Theoretical models of values Case studies examples
  Persuasion and Psychological Targeting
- Persuasive communication for attitude change
- Target communicatiion to personal characteristics

Prerequisites

None.

Teaching form

In-class lectures covering theoretical notions as well as lab activities.
Lectures will be in English and will be recorded.
Access to these recordings is reserved to students that, for some valid reasons, cannot attend in-class lectures. Students interested in accessing recorded lectures should email the instructor.

Textbook and teaching resource

Lecturer's teaching notes.
Slides and scientific articles will be made available on elearning.

Semester

Second semester.

Assessment method

- Verification of the acquisition of laboratory concepts through a written exam with closed questions. The written exam must earn at least a sufficient grade for the lab to be considered successfully attended. The grade will consist of the evaluation of the project.

- Final project based on work in small groups. Note that each group member will submit their individual final written project and give an oral presentation based on this work (collective written projects or copy-pasting of projects among group members will not be allowed).

Office hours

Office hours' schedule will be provided on a weekly basis.

Sustainable Development Goals