UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Big Data in Behavioural Psycology

2122-2-F9101Q030-F9101Q031M

Aims

Data Scientists often work in a multidisciplinary environment, in which they interact with experts in various disciplines, among which psychology. The present course aims to provide some basic concepts, methods, and theories of psychology, with the goal to make interdisciplinary interaction easier.

Contents

- The tools of psychology (an overview)

- Automatic and controlled cognition

- Language and cognition

- Personality and self-concept

- Communication and persuasion

Detailed program

We will address some central topics of psychology, without the pretence of giving an exhaustive treatment, but rather with the intention of providing a general idea.

The tools of psychology: after a brief overview of the instruments typically used in psychological research, we will focus on questionnaires and indirect measures of cognitions. Examples will be provided, and their advantages and limits will be discussed.

Automatic and controlled cognition: Not all processes of human cognition are controlled, and much mental activity is automatic. Automatic cognition refers to *thinking that occurs quickly, without taking much effort,* and is an important part of human behavior. We will discuss some psychological models that distinguish automatic and controlled cognition, and some ways to investigate them.

Language and cognition: Here we will address how language can be investigated to understand attitudes, beliefs, prejudices, etc.

Personality and self-concept: We will address personality theories and the impact of self and identity on human behavior.

Communication and persuasion: Here we will discuss how the characteristics of the perceiver must be taken into account to maximize the efficacy of communication.

Prerequisites

None.

Teaching form

For each topic, scientific papers or chapters will be proposed and discussed in the classroom; moreover, students will actively present contents (organized in groups).

Textbook and teaching resource

Slides and scientific papers will be made available on the e-learning page.

Semester

Second Semester

Assessment method

Computerized **written examination** on the theoretical concepts (with open and closed questions)

and

Final project, based on work in small groups. Note that each member of the group will deliver *his/her own individual written final project* and give an oral presentation based on this work (collective projects, or copy-and-paste of projects between group members, will not be allowed)

Relative weight on the final result: 50% written exam, 50% project

Office hours

Office hours are on **Tuesdays from 1 to 2 PM** (but please check the webpage https://www.unimib.it/cristina-zogmaister for updates).

Please signal by email your intention to attend to office hours (cristina.zogmaister@unimib.it)