UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Perception for Visual Communication

2526-1-F9202P005

Aims

Knowledge and understanding
The course aims to:

- Provide basic notions of psychometrics and psychophysics, useful for designing experiments and tests
- Illustrate and analyse salient visual phenomena functional to visual communication.

Applying knowledge and understanding
Upon completion of the course, the student:

- Will be able to read scientific articles in a profitable way to find useful information for their educational and professional path
- Will be able to manipulate relevant variables to replicate and/or modify visual phenomena that could be exploited in both traditional and digital graphics

Making Judgements
Development of the ability to critically analyse both theories of visual perception and scientific dissemination about visual perception and communication. These abilities will be achieved through the analysis of phenomena and theories, critical reading of what is found on the web concerning perceptual phenomena in websites dedicated to communication strategies, seminar activities, journal club activities and classroom discussions.

Communication Skills

- Development of the ability to communicate information, ideas, problems and solutions clearly and consciously to specialist and non-specialist interlocutors and in different training and work contexts
- Development of a solid ability to listen actively, to negotiate and to work in groups, including interdisciplinary ones, as well as to understand and critically analyse different points of view.

Learning Skills

- The course aims to provide not only basic notions but also logical tools that can aid the continuation of one's study path in an autonomous way, strengthened by a greater critical awareness and a renewed theoretical-conceptual and methodological sensitivity.

Contents

First part

- Elements of psychometrics
- Basic notions of psychophysics
- Main experimental paradigms developed in the field of psychophysics

Second part

- Illusions and theories in psychology of perception
- Analysis of perceptive phenomena and processes: visual field organization, amodal completion, transparency, the problem of perceptual constancies; color, third dimension.

Third part:

- Monographic course on light.

Detailed program

The course is divided into two parts.
Part I:

- Measure and measurement in experimental psychology
- Data and measurement scales
- Psychophysics: basic notions
- Psychophysical methods for experimental research
- Let's create an experiment, step by step
- How to read a scientific report and get the best out of it.

Part II:

- Why psychology of perception?
- The concepts of *reality* and *illusion*
- Gestalt, Cognitivism, Ecological theory
- Segmentation of the visual field into meaningful units
- Amodal completion and anomalous figures
- A stimulus for two percepts: homochromatic figures and phenomenal transparency
- The third dimension

Part III:

- Light

Prerequisites

None

Teaching form

56 hours of lessons

In addition to classroom lectures, documentaries will be presented, scientific reports will be read and analysed and websites will be presented and discussed with the classroom. Discussions in relation to the material presented in the classroom are also encouraged and a journal club activity will be activated in which students in groups of two can present an article of their choice.

Textbook and teaching resource

- Slides from the lessons
- Journal papers that will be made available on the course's e-learning page
- Daniele Zavagno e Daniele della Vedova (2025), *Fenomenologia della luce. Tra percezione e arte.*, Mondadori Università, Milano. (chapters 1-6)

For those wishing to learn more about psychophysics:
G.A. Gescheider (1997). *Psychophysics. The Fundamentals*, London: Lawrence Erlbaum. The book is available in ebook format at the university library.

Semester

October-December

Assessment method

The student can choose between two assessment methods:
A) **Classical Oral Exam** concerning the entire programme.

B) **Project exam** consisting of the following parts:
1. Journal club: Classroom Presentation of an article among those made available by the professor;
2. Project essay. Design of an experiment regarding a phenomenon chosen among those presented during the lessons. The structure of the essay will be explained in detail during the first lessons.
3. Oral exam mainly concerning the project and journal club presentation.

Office hours

Office hours will be announced during the first lesson

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION | GENDER EQUALITY | REDUCED INEQUALITIES