UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Sociology and Science Communication

2122-1-F0802Q067

Aims

The objective of the course is to complete students' preparation by developing their sensibility for the social and communicative aspects of scientific research, and his or her sociological imagination with particular attention to risk communication and the imagery of innovation, with the aim of providing adequate preparation for scientific communication in the knowledge society.

Knowledge and understanding.

At the end of the teaching the student will have to know the social foundations of science through a philosophical-epistemological deepening and a historical-critical reconnaissance of scientific institutions, the work of the scientist and the development of technoscience. He or she will also know the general fundamentals of human communication and science communication in particular, from dissemination to citizen science. He or she will also know the drivers of sociological imagination about technological risk, and will have also understood the importance and complexity of the communicative mediation between science and society in contemporary knowledge-society.

Applying knowledge and understanding.

At the end of the teaching, the student will have developed awareness about the knowledge, own public role and the social role of public engagement and Third Mission of contemporary universities and will therefore be able to understand the various contexts of communication and apply more appropriate registers and methods.

Making judgments.

The student will be able to process what he or she has learned, knowing how to recognize the situations in which scientific communication moves and to face its difficulties thanks to the development of a critical capacity through the analysis of the interweaving of communicative and innovative processes in contemporary society, between

personal passions, individual and collective interests, social values and expectations.

Communication skills.

At the end of the course, the student will have developed appropriateness in scientific communication, thanks to the comparison between the various models of communication and the various publics of science, and will be willing to develop over time an original style of communication, within the framework of responsible research and innovation.

Learning skills

At the end of the course the student will be able to consult the literature to keep up to date with developments in the subjects covered and will be able to analyse, apply, integrate and link the knowledge acquired with what has been or will be learned in other curricular teachings. He or she will also have started a personal training course to face own research in the framework of interdisciplinarity, reflexivity and awareness oriented to social complexity, in order to place own work and the development of science in the perspective of a democratic science-based society.

Contents

1. Introduction to the social dimension of the scientist's work.

2. Scientific knowledge as a peculiar social construction.

3. Risk perception.

4. Science communication.

5. Imaginary of innovation.

Detailed program

Lez. 1 Introduction to the course: individuals, institutions, knowledge. What does it mean to know? What do you mean, communicate?

Lez. 2-4 Naive model of scientific discovery and its limits: how society intrudes into observation, categorization, formulation of hypotheses and their controls.

Lez. 5-7 Institutionalisation of knowledge: the question of the "birth" of science, Mertonian ethos and its criticisms, scientific field as social field.

Lez. 8-9 Dissemination of knowledge: typology of knowledge and its communications.

Section 10 Socialization of knowledge: regulation; education; extended circulation; sedimentation and epigenetics of knowledge.

PART TWO: Communication of science and innovation

Lez. 11-14 Communication and public perception of risk: the deficit model; the turning point of the mid-twentieth century; uncertainty, danger, risk and outrage; equity, levers of trust, Prospect Theory, Grid-Group diagram; dissemination, engagement and participation. Fields, capitals and habitus.

Lez. 15-16 Theory and practice of scientific communication: aims, means and styles; citizen science & open science.

Lez. 17 Innovation in knowledge-society: the three revolutions of social history; knowledge as a non-natural public good; social innovation.

Lez. 18-21 Sociological imagination and innovation: between ancient myths (Gaia naturalistic holism, Kronos absolute order, Athena-abstract rationalism) and modern ones (cognitive reductionism, sociological narcissism, subjective relativism).

Prerequisites

None

Teaching form

Frontal lessons

Textbook and teaching resource

(A) A.Cerroni, Z.Simonella, Sociologia della scienza, Carocci, Roma 2014.

(B) A.Cerroni, Il futuro oggi. Immaginazione sociologia e innovazione: una mappa fra miti antiche moderni, Franco Angeli, Milano 2012.

Semester

First semester

Assessment method

Oral exam

Office hours

On demand by mail to the lecturer