**Educational objectives and expected learning outcomes**

The original inspiration of the subject “*Information Technology Literacy*” is that ***without humanistic culture it is not possible to face the challenges of contemporary society.*** Following the Covid 19 pandemic in particular, everyday life has been literally submerged by the “digital”, like the coast reached by a tsunami: through a screen you work, you learn since elementary school, you make purchases, you even relate almost exclusively.

This “hairpin bend of civilization”, designed in such a fast time as to take your breath away from every adaptive reflection, now requires a rewriting of laboratory teaching including new completely crucial topics, so that the “smart” reclassification of work and social activities can systemically ***become ordinary*** and at the same time oriented towards ***critical awareness and digital wisdom.***

**Contents**

The laboratory discipline “*Information Technology Literacy*” aims to deepen, in the theoretical / practical field, the revolutionary transformation of information from analogue to digital, analyzing its technological convergences and deepening the new ways of interaction with particular regard to artistic, cultural, work, social contexts. This in order to give young people critical and at the same time creative tools both to stimulate the recognition of meanings and opportunities, and to consciously orient themselves in the sea of poor quality and excessive “background noise”.

**Extended program**

1. The purpose of recognizing computer science as a culture and as a science. On the revolution from a “quality” of shades to a “quantity” of black and white: from atoms to bits. Etymologies, metaphors, common sense of the paradigm revolution. From analogue to digital: milestones of historical evolution, Moore's law, design criteria of man and nature, technological convergences. Examples of the continuous/discrete dichotomy in communication and knowledge.
2. Internet: genesis, formation and structure. The original project, circuit and packet switching, the TCP/IP protocol, the PC phenomenon, PC and LAN as a systemic pair, the birth of the World Wide Web. Internet in Italy and GARR network, worldwide usage data, *digital divides.*
3. On music: from living it to owning it to consuming it liquidly. Encodings and "added values" of audio and video. Physical aspects and digitization, storage standards and formats, types of editing. Sampling, quantization; compression versus high fidelity; application packages and examples in practical cases.
4. Evolution of information: old and new media. Media information and new socio-media paradigms. Evolution of media power: elements of *data analysis,* *digital journalism*, *social media mining*. Social-myths: new myths and models in the era of social networks. Digital awareness and wisdom.
5. The Quality of the Web. Peculiarities of an IT “service”, ergonomics and usability, design models, writing for the web, the systemic web to the organization, scientific methodologies of approach. The university portal “Ud’A”: conceptual map and types of navigation, the student *target,* web design, visual identity.

**Recommended bibliography**

Nicola Di Nardo, Angela Maria Zocchi, “Internet. Technical history, sociology”, UTET Library, Turin, 1999.

Properly chosen materials on the net.

**Delivery mode**

Conventional, in a shared and participatory context of brainstorming peculiar to a “laboratory of ideas”; attendance is highly recommended.

**Evaluation methods**

Type of exam: oral

Learning assessment methods: discussion of a shared in-depth essay on topics related to the course program.

Evaluation: final judgment of suitability

**Teaching period** - second semester

**Contacts**

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