

ALTRE ATTIVITÀ (ITO141)

1. language

Italian

2. course contents

Coordinator: Prof. ARIANNA PROCACCI

Year Course: 1

Semester: Annual

UFC: 3

Modules and lecturers:

- INFORMATICA (ITOAT1) - 2 cfu - ssd INF/01

Prof. Fulvio Gazzi

- SEMINARI (ITOAT2) - 1 cfu - ssd NN

Prof. Arianna
Procacci

3. BIBLIOGRAPHY

Capire l'informatica – Mezzalama/Piccolo – ed- Città Studi

Etica e responsabilità sociale delle tecnologie dell'informazione (1 e 2) – Di

Guardo/Maggiolini/Patrignani – ed. F. Angeli C corso completo di programmazione – Deitel – ed. Apogeo

Analisi Dati con Excel 2010 – John Walkenboch –

ed. Hoepli Analisi statistica con Excel –

Giuliani/Dickson – ed. Maggioli

Chiari P, Mosci D, Naldi E. Evidence based clinical practice: la pratica clinico assistenziale basata su prove di efficacia. Milano: Mc Graw Hill, 2011.

4. LEARNING OBJECTIVES

Knowledge and understanding (Dublin 1). At the end of the course the student will be able to attribute appropriate meanings to the teaching contents related to:

- a) IT concepts useful for nursing;
- b) computer programming;
- c) use of free terms and MESH terms;
- d) databases relevant to the research question.

Applied knowledge and understanding (Dublin 2). At the end of the course the student will be able to interpret and argue, on the basis of appropriate knowledge and rigorous reasoning, emblematic problematic situations related to:

- a) hypertext processing; excel tables aimed at statistical calculations; power point presentations;
- b) elaboration of graphs;
- c) develop a research question (PIO or PICOM);
- d) define a search string;
- e) select the articles consistent with the research question in the main biomedical banks.

Making judgments (Dublin 3). At the end of the course the student will be able:

- a) to critically analyze and evaluate, with a rigorous method, with up-to-date knowledge, appropriate information and valid interpretative criteria, topics and problematic situations with particular reference to IT ethics;
- b) critically read the results of the articles selected to confirm or disconfirm the research question
 - a) using the correct terminology and syntax both in written and oral form;
 - b) expressing himself in a clear, understandable way adapted to the type of interlocutor and his receptive and interpretative abilities.

Ability to learn (Dublin 5). At the end of the course the student will be able to self-assess his/her own learning abilities in relation to the teaching topics:

- a) identifying, on the basis of his intellectual performance and the feedback provided by the teachers, any need for cognitive or methodological compensation/integration;
- b) autonomously using the information sources available to address these needs.

5. prerequisites

In order to understand the teaching contents, the student must have logical-mathematical knowledge and skills; computer operation; basic mathematics; scientific English

6. TEACHING METHODS

Exercises with scenarios in small groups and practical exercises; group and individual work on mandates aimed at bibliographic research statistical bibliographic research. Group work is conducted interactively by the teachers

7. OTHER INFORMATIONS

The teachers are available for information on teaching and clarifications on lessons by appointment.

8. METHODS FOR VERIFYING LEARNING AND FOR EVALUATION

This module does not include an exam but an eligibility. To obtain the computer science qualification, students must correctly answer 50% of the questions plus one. Verification of suitability will be carried out through a written exam with multiple choice questions and a simulation of calculations on Excel. As for the bibliographic research seminar, students will have to produce a research report.

9. program

<Computing>

Local processing unit: hardware objects: CPU, I/O, main memory (RAM, ROM), mass memory (HD, removable devices, CD), peripherals; software objects: operating system (kernel, application layer), file system, user interface, applications, virtual machines; most common file extensions.

Centralized processing/distributed processing local versus remote; monolithic/modular software; modularity characteristics; client/server architecture; cloud computing
Access to distributed information: domains and subdomains;
authentication/credentials/permissions; shared resources (data, peripherals).

The network and web communications: definition of hypertext; the tools: browsers, client programs; services: mail, chat, forum, blog, social-networking.
Web searches: search engines; tagging; simple searches and advanced searches; bring them.

Applications (part for the computer lab on PC): database; definition and use; office applications;
Microsoft Office Word (text formatting, styles, tables)

Excel: simple and conditional formatting; Filter and Sort; simple and complex functions;
addressing; pivot table; graphs; data analysis; descriptive statistics.

Power Point: creation of simple presentations; background objects, text boxes, connectors, graphic objects, sounds; non- sequential interactive visit; buttons and links; animations

Elements of high-level programming (principles): languages and algorithms; definitions; flowchart; compilers and interpreters
C language; Java: environment and keywords; first input and output instructions; arithmetic and decision operators; develop simple programs

References on ethics in information technology: computer ethics; professional ethics and social responsibility; ethics in and of the network; Governance on the internet

<Library search>

Re-fresh use of search engines and databases and construction of the search string. Small group exercises