

# DIGITAL HUMANITIES (LM70)

(Università degli Studi)

## Teaching COMPUTER SCIENCE FOR CULTURAL HERITAGE

GenCod A004187

**Owner professor** Francesco TOMMASI

**Teaching in italian** COMPUTER SCIENCE FOR CULTURAL HERITAGE **Course year** 1

**Teaching** COMPUTER SCIENCE FOR CULTURAL HERITAGE

**SSD code** ING-INF/05

**Language** ENGLISH

**Curriculum** COMUNE/GENERICO

**Reference course** DIGITAL HUMANITIES

**Course type** Laurea Magistrale

**Credits** 9.0

**Teaching hours** Front activity hours: 63.0

**For enrolled in** 2022/2023

**Taught in** 2022/2023

**Location**

**Semester** First Semester

**Exam type** Oral

**Assessment** Final grade

**Course timetable**

<https://easyroom.unisalento.it/Orario>

### BRIEF COURSE DESCRIPTION

- What is an operating system
- The UNIX operating system
- The shell and the Command Line Interface
- Useful UNIX commands and utilities
- Scripting languages and their use
- Text encoding – Unicode, UTF8 and related tools
- File formats: description and manipulation (text, image, audio, video)
- Network basics and main network tools
- Computer security – digital objects integrity and authenticity

### REQUIREMENTS

Familiarity with computers (at least at ECDL level)

### COURSE AIMS

The course aims at providing the students coming from the humanities with the basics of Computer Science. The course is based on UNIX®, because of the popularity of such operating system among professionals.

### TEACHING METHODOLOGY

The course is strongly oriented towards a hands-on methodology.

---

ASSESSMENT TYPE                      Writing a bash script aimed at solving a given problem in a given time.

---

FULL SYLLABUS

- What is an operating system
- The UNIX operating system
- The shell and the Command Line Interface
- Useful UNIX commands and utilities
- Scripting languages and their use
- Text encoding – Unicode, UTF8 and related tools
- File formats: description and manipulation (text, image, audio, video)
- Network basics and main network tools
- Computer security – digital objects integrity and authenticity

---

#### REFERENCE TEXT BOOKS

Textbook:

All needed reference material is composed, organized and constantly updated by the teacher. The material is made available to students through the course moodle site.

Additional, useful references:

- Franco Tommasi, *Alla scoperta di UNIX*, 2021, ISBN 979-1220082204
- Peek, Todino, Strang, *Learning the Unix Operating System*, 5th ed. O'Reilly 2001, ISBN 978-0596002619:
- Newham, *Learning the bash Shell*, 3rd ed., O'Reilly 2005 ISBN 978-0596009656
- Cooper, *Advanced Bash-Scripting Guide*, <http://tldp.org/LDP/abs/html/>
- Silberschatz, Galvin, Gagne - *Operating System Concepts* - Wiley - 9th ed. (2013) - ISBN 978-1118063330