DISCIPLINE DELL'AUDIOVISIVO, DELLA MUSICA E DELLO SPETTACOLO (DAMS)

A. A. 2023-2024

COMPUTER SCIENCE LABORATORY APPLIED TO CULTURAL HERITAGE

General information	
Year of the course	I Year
Academic calendar (starting and ending date)	I Semester (25/09/2023 – 13/12/2023)
Credits (CFU/ETCS):	3
SSD	-
Language	Italian
Mode of attendance	Attendance is regulated by Article 4(2) of the Study Course Regulations

Professor/ Lecturer	
Name and Surname	Renato Minichelli
E-mail	renato.minichelli@uniba.it
Telephone	0805717462
Department and address	Faculty of Languages, IV floor, Garruba 6 street
Virtual room	Microsoft Teams
Office Hours (and modalities: e.g., by appointment, on line, etc.)	At the end of the lessons or by appointment.

Work schedule			
Hours			
Total	Lectures	Hands-on (laboratory, workshops, working groups, seminars, field trips)	Out-of-class study hours/ Self-study hours
75		30	45
CFU/ETCS			
3		3	

Learning Objectives	Knowledge and understanding of the hardware and software necessary for audiovisual processing, management of IT workflow for audiovisual, especially audio, and organization of material (Filmed). Creation of processing sessions for an audiovisual product and basic notions for processing. Problem analysis and possible solutions.
Course prerequisites	In order to understand the course, the student must possess general knowledge of basic computer science. These concepts should have already been acquired in school.

Teaching strategie	Frontal lessons; Practical laboratory activities on DaVinci Resolve software, in which the student will acquire the basic computer skills for encoding and transcoding audiovisual and musical digital files.
Expected learning outcomes in terms of	Knowledge and understanding of the hardware and software necessary for audiovisual processing, IT workflow management for audiovisual theater and photography, especially the audio one, and organization of shooting material (shot).

Palazzo Ateneo, Piazza Umberto I n. 1 - 70121 Bari (Italy)
tel. (+39) 080 5714556-4487 • fax (+39) 080 5714206
direzione.dirium@uniba.it; direzione.dirium@pec.uniba.it
c.f. 80002170720 p. iva 01086760723

Knowledge and understanding on:	• Operating system • Hardware I/O • Multimedia Software • Metadata
Applying knowledge and understanding on:	• Multimedia file management • Codec A/V
Soft skills	• *Making informed judgments and choices* Analysis of a workflow. Management of any workers involved in the workflow. • *Communicating knowledge and understanding* Technically translate creative requests. • *Capacities to continue learning* Carry out small and medium-sized audiovisual works independently Engage in structured audiovisual work.
Syllabus	
Content knowledge	The computer, file structure and data storage systems Analog-digital converters Programs, operating systems and applications The networks Digital audio The codecs Practise
Texts and readings	F. Ciotti, G. Roncaglia, *Il mondo digitale, introduzione ai nuovi media*, Editori Laterza. T. Ohanian & N. Phillips, *Digital Filmmaking,* Focal press edizioni. N. Tangari, *Standard e documenti musicali*, Editrice bibliografica.
Notes, additional materials	Tutorial sessions on Blackmagic Davinci Resolve provided by the teacher. Video tutorials.
Repository	Slides, notes and the material to carry out the practical exercises will be available on the teaching teams channel.

Assessment	
Assessment methods	The student will be assessed through one of the following forms: frontal interview; Practice Test. Exemptions and pre-appeals are foreseen.
Assessment criteria	• *Knowledge and understanding* The student's knowledge and understanding of the topics covered in lectures and reference texts, related to basic computer systems. • *Applying knowledge and understanding* The knowledge and ability to understand audio-visual application software in an applied manner. • *Autonomy of judgment* The ability to choose a technical route. • *Communicating skills*

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	Proficiency in the use of specialized vocabulary and appropriate lingo; the ability to articulate independent judgments and to rework what has been learned from lecture questions and in reference texts. • *Capacities to continue learning* The ability to congruently use acquired study tools and methodologies.
Final exam and grading criteria	The laboratory allows the achievement of a passing grade. The exam is considered passed when the grade corresponds to suitable. The assessment of the paper aims to ascertain the methodological skills, mastery of the terminology of the field, autonomy of judgment and the skills of exposition and argumentation, acquired by the students or students during the course of training. Conversely, a test is considered unsuitable in which students fail to propose a test that is consistent with the formative objectives of the workshop, using language that is not sufficiently clear and without using sources to support the proposed arguments.
Further information	

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