IO1 - CURRICULUM DESIGN

- Executive Summary -

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Digital Humanist

IO1

Curriculum design

Contents

CURRICULUM DESIGN

1.1 Methodology for training curriculum development

Methodology for creation of the curriculum model is based on development of curriculum prototype, from which to build different national curriculum. The purpose of the curriculum prototype is to establish and define a set of disciplines (courses) with theoretical and with practical aspects, helping professors to achieve the appropriate knowledge and skills, which will satisfy the objectives of the project - to build, test and then distribute a research based model framework that will assist the education sector to match the curriculum of their students with the professional requirements expressed by the community of digital heritage management.

The Methodology is based on 4 theoretical models for curriculum creation:

a) Tyler model;

b) Taba model;

c) Oliva model and

d) Hunkins model.

They are integrated under common principles:

- With well-defined objectives
- With identified prerequisites
- Balanced – in the subject and covering the gaps
- Understandable – with well-defined disciplines (courses)
- With Horizontally integrated content – links and sequence between the courses
- With Vertically integrated content – links and sequence between the learning units in a course
- With spiral based increasing of knowledge / skills
- Having age / generation relevance
- With duration for achievement of knowledge and skills (lectures / seminars, ECTS)

Tyler (1949) published Basic Principles of Curriculum and Instruction

Four key points of the model can be tuned for the purpose of the project: objectives – the purposes of education through the curriculum, Instructional experience related to the purposes, organization of the experience for the purpose of having maximum curriculum effect (from education) and evaluation and assessment of the education purposes.

Our approach for using Tyler model is to create curriculum course mapping of current Institutional curriculum with the research, including from IO1. We applying the following methods of teaching and learning: cognitive, affective and psychomotor. We shall Implement learning through exploration and learning via doing. Organizing the students' experience will be from simple to complex, from general to specific. Experiences should build single course units. Evaluation and assessment of the results will be done through key performance indicators (KPIs).

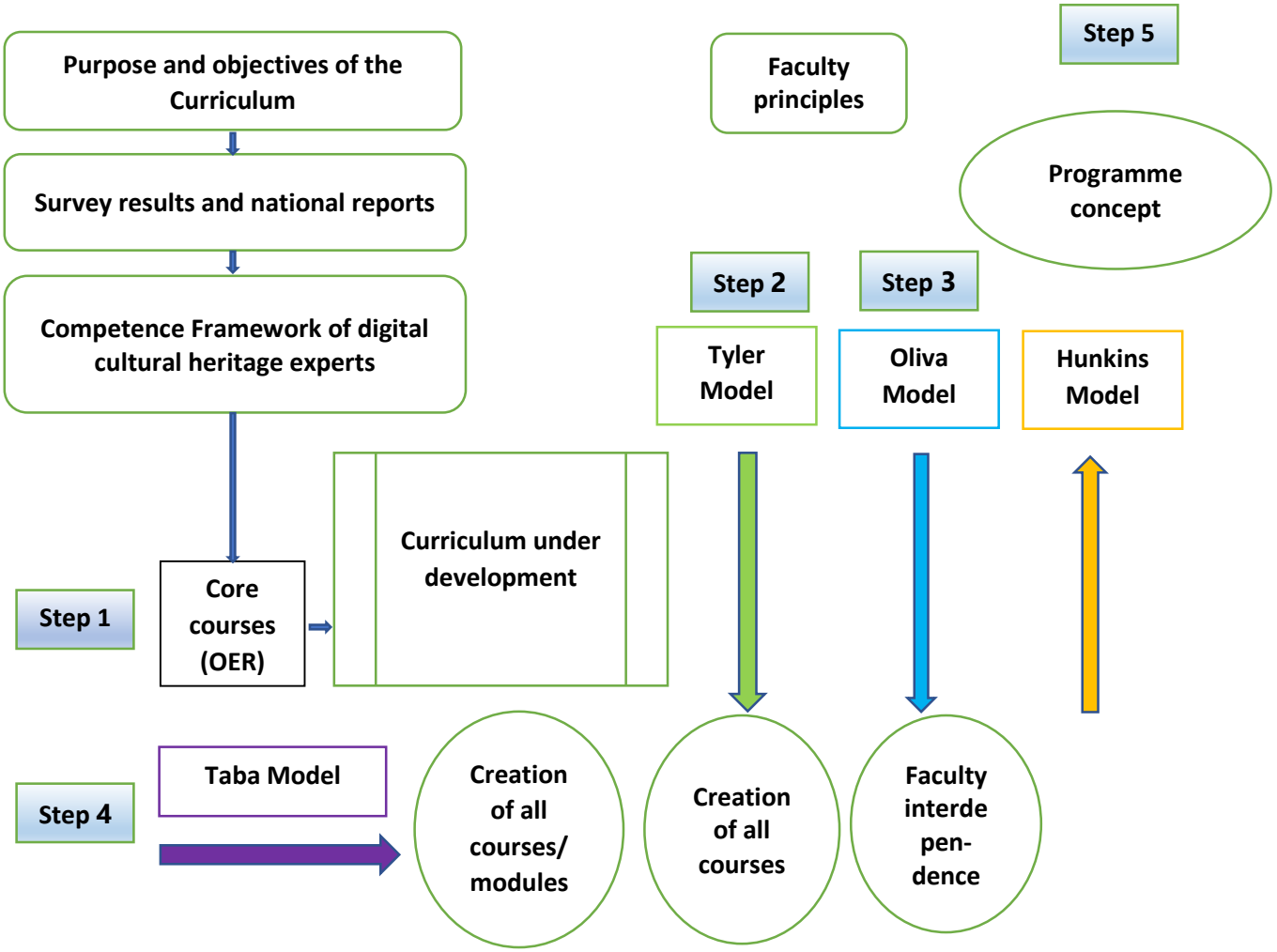
Hilda Taba (1962) in "Curriculum development: Theory and Practice" believed that those who teach the curriculum (the teachers/lecturers), should participate in developing of the curriculum. The concept is that teaching was not limited to a mere transfer of facts, but was, rather, the means of developing students' thinking skills, which she understood to be active and reciprocal between the student and subject matter. Taba model is accepted as bottom-up model. Our approach for using Taba model is: to create a course as a sequence of modules; some modules to have alternative ones.

The **Peter Oliva** (2005) model offers to faculties a possibility to make complete development of a school's curriculum. The basic principles that the students in a faculty have common abstracted needs for education. The model offers faculty-wide interdisciplinary programs making short path across areas of faculty specialization.

The Oliva model is based on previous curriculum models - Tyler model and Taba model, further stressed on the „needs from student and society". Oliva model is expected to provide a foundation for an understanding of its contribution to logistics curriculum. Theoretically, the design and development of curriculum in logistics programs are based on constructive inputs from logistics practitioners. For our curriculum Oliva's basic principles will be allied for students in a faculty, which have common abstracted needs for education: to incorporate Faculty principles; to create Faculty inter-dependencies in the courses.

The **Hunkins** (2004) model addresses the concerns of conceptualists, of putting stress on understanding the nature and power of curriculum. The model built on society's (community's) values and beliefs. Hunkins model is accepted as decision-making model, having a unique feature called the feedback and adjustment loop. This loop allows decision makers to refer back to previous stages to make changes and any modifications. This loop contextualizes the process of creating and implementing curriculum

The presented above Methodology for development of training curriculum can be applied via a procedure, consisting in 5 steps:



The developed Procedure consists of 5 steps:

a) Based on "Results and Conclusions from the Survey" (deliverable from IO1) and

the developed 5 domains of open education resources (OER)

b) To create the Major set of courses in the Curriculum, via tuning the "Core courses" and applying the Tyler model with its principles

c) To create faculty inter-dependency between the courses, applying the Faculty principles of Institution, which will provide the education / training process, applying Oliva model

d) To establish modules in the courses of the Curriculum, applying Taba model

e) To Conceptualize the Curriculum, applying Hunkins' model, as well as to Check the achieved curriculum objectives.

1.2. Digital Humanist Curriculum design

1.2.1 Target groups

Digital Humanist Curriculum is targeted at Bachelor or Master students and life-long learning of experts engaged in the cultural heritage sector, eg., heritage officers lacking digital skills.

The Digital Humanist programme is open to students in areas like Anthropology, Art History, English Language and Literature, Film Studies, Geography, Tourism, History, Journalism, Marketing, Modern Languages, Music and Culture, Philosophy, Political Science, Sociology, etc.

1.2.2 Course description

The **Digital humanist course** develops digital cultural promotion and entrepreneurial skills, with innovative and interactive teaching methodologies. It is designed to shape the professional figure of a typical humanist, specializing in areas such as literature, philosophy, history, religion, languages, art history, philology, semiotics and visual arts, with IT skills and competences.

The aim of this new figure is to exploit theoretical methodologies typical of the humanistic world, to be able to carry out scientific collaborations developing practices with the use of resources and tools typical of the information technology field useful in all areas of the human sciences and with an emphasis on cultural heritage management and promotion.

The most popular **professional profiles**, described in the National Classification of Occupations and Positions are: travel agent, sales representative, marketing associate, economist, information broker, specialist in public administration, specialist on information management, coordinator of EU projects, etc.

Graduates of Digital Humanist programme find **jobs** in many sectors including web agencies, software companies, software localization companies, libraries and museums, and many fields in the arts of entertainment and culture.

1.2.3 Professional profile

Different sources were used in developing professional profile of Digital Humanist like literature review, focus group research, national standards of professional competences, job descriptions, and professional associations' recommendations. Integrated framework of **profile design**, **characteristics of the further professional** (competences, skills, know how, indicators, expected results) and **curriculum design features** (modules, courses, OER content) were built.

Digital humanist capabilities, expected know how and related skills to be developed were divided in two groups. Some were considered as prerequisites and others - developed within the curriculum, as learning objectives.

Five blocks or layers of activities refer to the five competence areas of the Digital Humanist curriculum:

Digital humanist professional profile

Competence area	Skills	Knowledge
PLANNING, ELABORATING AND MANAGING CULTURAL HERITAGE BUSINESS DEVELOPMENT PLANS AND PROJECTS	Planning, organization, control, decision, result and customer orientation Interpreting the needs for change in cultural communication models in relation to the specific identities of the territories Articulate the communication objectives with respect to the aims identified to valorise the territorial cultural assets Translate company directives into strategies appropriate to their area of responsibility / competence / territory	The relationship between heritage and sustainable development Strategy development Ethics Project management process and functions Sustainable development
ANALYZE THE MARKET, CULTURAL HERITAGE ASSETS AND APPLY ICT INSTRUMENTS	Apply context analysis techniques (market analysis, competitive analysis), cost-benefit/opportunity/profitability analysis Identify and apply tools for better narrative support Apply the tools to improve the experience of users of cultural contents Develop products with Quick Response (QR) Code, Augmented Reality (AR), three dimensional (3D) elements, Holograms, to increase experiential factors in real life	Market analysis Cost-benefit analysis Digital tools Multimedia
CULTURAL COMMUNICATION AND PROMOTION	Manage the nonconventional narration on social networks generated in the field of digital communication Concept and development of a digital communication project	Communication process Narrative support Social media and

	Developing a social media marketing campaign Design the digital communication of cultural assets Manage the methods and tools according to a cross media and transmedia logic Designing narrative communication structures	networks Storytelling Narrative posts Narrative structures
ENTREPRENEURSHIP IN CREATIVE INDUSTRIES	Logical and methodological skills in developing entrepreneurial business models for promoting cultural heritage Ability to manage entrepreneurial entities in creative industries Team management, emotional stability and conflict management Foster interaction with others, interpersonal communication and effectiveness, group and meeting management, public speaking, persuasion, negotiation, leadership, emotional stability and conflict management	Business planning Business models Financial management Team management Leadership styles Conflict resolution

1.2.4 Learning outcomes

Expected learning outcomes can be structured in two major groups:

- Domain-specific (cultural heritage management and promotion) and
- Digital competences.

The students will get to know the principles, methods and techniques of linguistics, including its computational aspects, historical research, communication, text coding, document management, semi-structured content and data, technologies and services related to the web, graphic and multimedia production, graphic interfaces and their usability.

Humanities competences

- Be able to process archival collections, curate exhibitions, transcribe and annotate historical documents;
- Be able to formulate research questions, collect data and apply research methods to find the information that you need;
- Be able to read critically, write effectively, analyze problems and solve them;
- Be able to apply visual and oral rhetoric, grammar and composition principles in order to improve the readability and aesthetic appeal of the presentation;
- Be aware of the social, political and ethical issues related to the problem;
- Be aware with the principles of intellectual property and the fair use doctrine;
- Be aware of intellectual property issues as they apply to multimedia;
- Be able to apply the legislative principles;
- Be able to collaborate with peers by assigning and dividing different tasks;
- Be able to deal with conflicts;
- Be able to negotiate and to build strong social networks;
- Be able to manage, administer and budget projects;
- Be familiar with the media landscape, including traditional and social media.

Technical Competencies

- Create and study an electronic text;
- Create electronic music and compose on the computer;
- Design a typeface;
- Create bit-map and vector graphics;
- Create and manipulate digital photographs;
- Design the layout and composition of a publication;
- Create an animation;
- Create a virtual space;
- Create instructional materials;
- Create an electronic presentation.
- Build a sophisticated WWW site;
- Create an interactive CD-ROM;
- Create time-dependent media (audio and video);
- Set up and network a PC or Mac;
- Use a WWW server;
- Create interactive works;
- Develop databases;
- Conduct an electronic text analysis;
- Use data modelling to create digital resources;
- Use metadata to describe your content so that people can easily find it;
- Use transcription to create online contents;
- Apply Cascading Style Sheets (CSS) for simple data representation;
- Create annotation to add interactivity to your content;
- Use online collaboration tools (Google documents and wiki software) to stimulate;

- Engagement and knowledge sharing;
- Be able to scan, share and deliver access to digital materials;
- Apply the Guidelines of the Text Encoding Initiative (TEI) to encode texts;
- Develop mapping tools to point out locations;
- Use QR tags (3D bar codes), combined with iPhone apps to allow places and objects to tell their own stories;
- understand digital editing as a holistic process and to know typical phases in a digital editing project, methods and technologies applied and standards used in each phase;
- Know selected tools supporting the various phases in digital editing.

1.2.5 Entry requirements

Students or employees who apply for the programme should have basic knowledge and skills in the field of Business Administration, Management and Marketing

Digital Humanist curriculum comprises a set of **suggested courses**, methodologies and experiences that will indicate students the best combination to achieve advanced knowledge and skills in the field of digital cultural communication

This is coherent with the main Digital Humanist project aim, to design, pilot and disseminate a new university-based advanced learning program, intended to refine and fine-tune business and marketing of cultural heritage assets, to create prepared, competent and experienced professionals.

Curriculum design

OER	Individual Learning units	Suggested Courses
OER1 PLANNING, ELABORATING AND MANAGING CULTURAL HERITAGE BUSINESS DEVELOPMENT PLANS AND PROJECTS	1.1 Digital humanities evolution: sources and methods 1.2 Cultural and creative enterprises 1.3 Digital heritage: the past in a digital present 1.4 Open access and digital ethics 1.5 Cultural heritage management and sustainable development	Digital Methods for Humanities Strategic Management Innovation and Entrepreneurship Marketing Business administration Data analysis Mobile and social media Digital image processing Leadership Entertainment technology software and virtual worlds Data mining and data warehousing
OER2 ANALYZE THE MARKET, CULTURAL HERITAGE ASSETS AND APPLY ICT INSTRUMENTS	2.1 Digital marketing research of cultural heritage assets 2.2 Digital audience and analytics 2.3 Digital cultural heritage content 2.4 Digital tools for producing multimedia contents 2.5 Animation and gamification: creative possibilities for digital communication of cultural assets	
OER3 CULTURAL COMMUNICATION AND PROMOTION	3.1 Digital and social media marketing of cultural heritage assets 3.2 Social media marketing campaign 3.3 Digital curation - digital libraries, museums and cultural institutions	

	3.4 Storytelling **3.5 Narrative structure and Web writing** **3.6 Mobile media in cultural communication**	
OER4 **ENTREPRENEURSHIP IN CREATIVE INDUSTRIES**	**4.1 Business model development** **4.2 Starting a new business** **4.3 Start-up management** **4.4 Team Management** **4.5 Financial options and scenarios for Creative and Cultural Industries**	

1.2.6 Content

Digital Humanist curriculum comprises three structural elements:

Block 1: n courses, 15 ECTS

Partners choose existing courses as **suggested** learning features

Block 2: 1 course, 6 ECTS

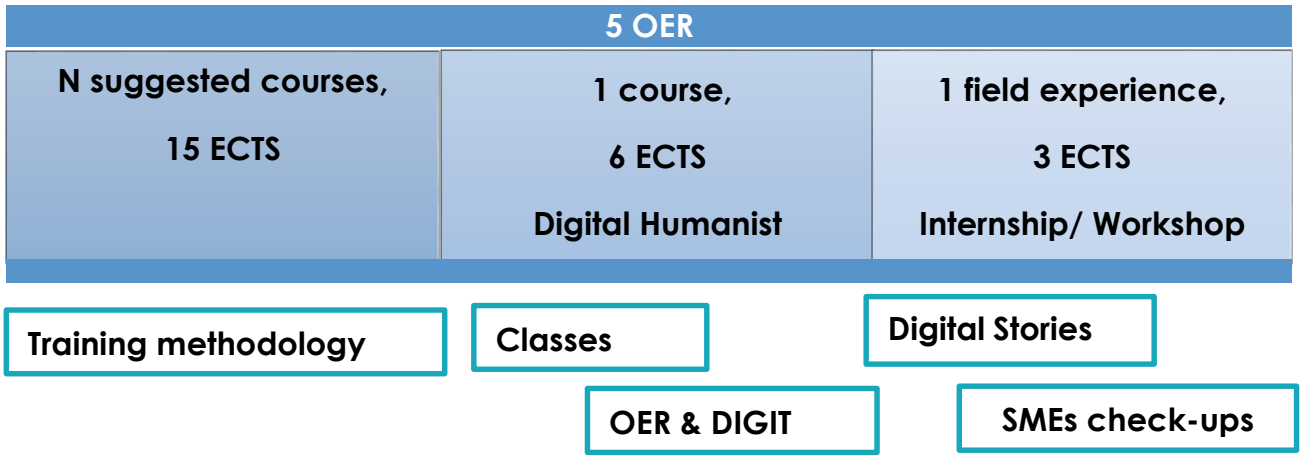
Digital Humanist course

Block 3: field experience, 3 ECTS

Bachelor – internship

Master – workshop

Digital Humanist curriculum – 24 ECTS



1.2.7 Training methodology

Student-centered learning perspective will contribute to focus on **active learning**

Curriculum, courses set and modules will have a **flexible structure**

Web-based learning materials and open access to all individual learning units for reviewing some parts for additional literature sources, examples etc.

Students will be involved in the **complete process of** creating, publishing and managing

a **digital edition**.

The practical parts will allow students to apply techniques learned beforehand and to use the tools, introduced to them by the instructors.

SMEs check-ups will allow putting into practice, foster professionality and facilitate employment.

Chosen **media** include traditional teaching (lectures), web-based multimedia learning materials (OER and other DIGIT material), digital stories and field experience (SMEs check-ups).

1.2.8 Adoption

We suggest in Digital Humanist curriculum different adoption alternatives. It can be a new University programme or adapted/enriched existing programmes with this Digital Humanist curriculum.

Adoption

	Bachelor	Master	Life-long learning
Courses	A = 6 ECTS B C Internship = 3 ECTS	A1 – upgraded in content and different competences, B1 C1 = 6 ECTS	Any of A,B,C or A1 offered or Special package for the persons who already work in this filed
Competences	Practical, know to use, etc.	Understanding, using in international context, etc.	Specific – knowledge & skills focused

Adoption example: Athens University of Economics and Business offers MSc programme: Digital Methods for the Humanities. It includes required and optional courses. Separate learning units or the whole Digital humanist course can be used in the existing MSc programme:

Digital Methods for the Humanities (MSc)

(curriculum)

	Title	ECTS	Period	Digital Humanist units
	Required Courses			
Y1	Programming elements with Python	6	A	
Y2	Representation and organization of information & knowledge	6	A	
Y3	Managing, editing and issuing digital resources	6	A	
Y4	**Data Management**	6	B	**Unit Digital audience and analytics**
Y5	Applications of Digital Methods in the Humanities	6	B	
	Optional Courses			
E1	Language Technology	6	B	
E2	Digitization technologies, techniques and applications	6	B	
E3	Interactive design and multimedia	6	C	
	.....			
E7	**Special Topics in Digital Methods in Humanities**	6	C	**Digital Humanist course (all units)**

1.2.9 Assessment

Students will be evaluated considering different educational approaches, namely:

- Tests after each learning unit. Students have to pass through all the uploaded on DIGIT platform materials (papers, presentations and video) for each unit and at the end they have to answer questions related to the topic.

- Company check-ups. Students have to carry out research in selected company or institution in cultural heritage sector and prepare short report including their findings.

The final grade of the students/ trainees will be a combination between the tests after each unit on DIGIT e-learning platform and company check-ups as follows

FG = 50% T + 50% Ch-up,

where: **FG** = Final Grade;

T = Test;

Ch-up = Check-up.

Conclusions

This task and research phase was fundamental to align cues, evidences and objectives to pursue the curriculum design and Digital Humanist project further steps. Here the main issues and solutions related to Digital Humanist. field of research and goals are summarized.

Job market and complex, evolving cultural heritage context require high-skilled and motivated professionals to lead contemporary development of this sector in the digital era. Higher education and Life-long learning in Digital humanist field is important to educate young motivated and skilled professionals.

University based Digital humanist courses and curricula in the field of cultural heritage are few, sporadic and marginal within various Bachelor and Master degrees in Europe..

Existing courses and curricula are delivered through traditional face-to-face lectures, whereas solid advanced preparation is made of a balanced mix of traditional and innovative teaching methods involving knowledge, competence building, observation and in field experience.

University based learning is vital to provide further professionals (students) with advanced knowledge, skills and experience to be easily employable in institutions and companies related to promotion of cultural heritage or in the creative industries. They are expected to fulfill firms' needs and foster value creation and business growth faster, cheaper and more effectively and strategically.

Modern organizations in cultural heritage sector need to have a strategic approach over development of communication and entrepreneurial skills of their employees. Evolved

Digital humanist professional profile skills include relational, managerial, analytical, strategic and entrepreneurial capabilities.

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