Digital Repositories and Open Educational Resources

Course Units

- 1. Open Education
 - o Introduction to the European and International Educational Landscape
 - Key Concepts and Components of Open Education
 - Strategies, Policies, and Frameworks for Open Education in the 21st Century
- 2. Open Educational Resources (OER)
 - Definition and Types of OER
 - Open Licenses and Copyright Tools for OER
 - Creation, Searching, and Use of OER
 - Accessibility of OER
 - Utilization of OER in Educational Practice
- 3. Learning Objects
 - Definition and Types of Learning Objects
 - Metadata for Learning Objects
 - o Models and Standards of Learning Object Metadata
 - Life Cycle and Processing Models for Metadata
- 4. Digital Repositories for Open Educational Resources
 - o Core Concepts and Functional Characteristics of Digital Repositories
 - International Experience with Digital Repositories for Educational Content
 - Software for Developing Digital Repositories
 - Analysis, Design, and Organization of Digital Collections of Educational Resources
- 5. Evaluation of Open Educational Resources
 - Evaluation Criteria for OER
 - Quality Frameworks and Seals

Detailed Description of Units:

Digital educational content is a core pillar in most national policies and initiatives aimed at the integration and constructive utilization of digital technologies across all levels of education and forms of learning. The creation of digital educational resources, the development of online services for organizing, efficiently searching for, locating, and widely disseminating educational resources, as well as designing methodological and pedagogical frameworks for their use to enhance the learning process, constitute a common objective in the educational policies of many countries. The term Open Educational Resources (OER) is used to describe any type of educational material that is freely available as public domain content or under open licenses that allow for its free use, adaptation, and redistribution (UNESCO 2012).

This course focuses on both the theoretical discussions, foundational concepts, philosophy, and policies underpinning the openness of education, as well as practical aspects such as the design, creation, storage, sharing, reuse, and evaluation of digital educational resources.

In the **first unit**, we introduce the European and international educational landscape as shaped by the philosophy of Open Education, emphasizing the way people should produce, share, and build knowledge. The components, policies, and development strategies for Open Education within 21st-century educational systems are also presented and discussed.

The **second unit** focuses on Open Educational Resources, covering their types, the licenses and copyright tools that facilitate their use and sharing. Practical aspects of creating, searching for, and utilizing OER in educational practice are given special emphasis.

The **third unit** delves into the definition and types of learning objects, particularly digital learning objects, and the metadata models used for their efficient storage in digital repositories. Modern models and standards for learning object metadata, as well as the technologies for implementing them, are explored in detail. Finally, topics related to the life cycle and processing and curation procedures of metadata are presented.

The **fourth unit** centers on digital repositories of Open Educational Resources. Initially, it presents the fundamental concepts and operational characteristics of digital repositories along with significant international initiatives in digital repositories for educational content. Emphasis is placed on the analysis, design, and organization of digital collections of educational resources and on the software used for developing digital repositories. Students are organized into working groups to design and implement a project involving the development of a digital repository and the creation of a digital collection of OER.

The **fifth unit** covers topics on evaluating and ensuring the quality of Open Educational Resources. Frameworks and criteria for evaluating OER for effective utilization in the educational process are presented, and contemporary topics related to quality assurance schemes are discussed.