

Course Description

EDUM-ET-101 The Theory and Practice of Teaching and Learning with Technology

Leading Lecturer: Dóra Lévai PhD assistant professor

Aim of the course

The purpose of this course to provide an introduction to the field of educational technology and its implications for learning and teaching. Students will investigate the cognitive processes underlying learning, such as behaviour management, information processing, cognitive assessment, meaningful learning, schema theory, situated learning, motivation theory, constructivism, social negotiation, distributed learning as well as the relation of these processes to technology-integrated instructional design. Examples of learning and teaching strategies, classroom applications and educational units that model the techniques related to the various learning theories along with the integration of technology into the design of such units will be demonstrated and discussed.

Learning outcome, competences

Knowledge:

On successful completion of this course, students will:

- Develop an understanding of the basic psychological principles of learning discussed in the course and their implications for technology-integrated instruction.

The completion of the course contributes to the following aspects of professional knowledge:

- Has background knowledge of the models of educational theories, the evolution of the various theoretical paradigms.
- Has knowledge of the latest results of research in education science and its neighbouring fields and the relevant pedagogical innovations; and can analyse and interpret them critically.
- Has deep knowledge of scientific theories of learning, the strategies and methods of learning and the methods of supporting learning and teaching.

Skills:

By the end of the course, students will be able to:

- identify practical applications of the basic psychological principles of learning
- identify, understand and develop practical applications of these principles in the field of educational technology

The completion of the course contributes to acquiring the following professional skills:

- Is able to make choices from relevant viewpoints while gathering information about the field of education science and its neighbouring disciplines using national and international databases; and can independently use and apply this information in work.
- Is able to compare research results with pedagogical practice.
- Is able to formulate practical implementation proposals.
- Is able to prepare professional materials based on independently chosen aspects, to present and analyse research results with objectivity, to write shorter professional texts independently.
- Is able to interpret professional scientific discourses and to compare arguments of different viewpoints.

Attitude:

By the end of the course, students will develop:

- critical, creative and reflective attitudes towards technology-integrated teaching and learning

The completion of the course contributes to development of the following professional attitudes:

- Considers important the social scientist perspective in his/her professional identity, is open towards the interdisciplinary approach of education science.
- Has professionally established critical approach and committed to professional analysis based on values and knowledge.
- Approaches connections of theory and practice with evaluative and interpretative reflectivity. Formulates relevant professional criticism, explicates his/her opinion convincingly and clearly, can argue in professional debates.
- In professional relationships represents his/her professional values and believes and argues to defend them.

Autonomy and responsibility:

The completion of the course contributes to the following areas of professional autonomy and responsibility:

- Is able to work independently and with responsibility.
- Takes the proactive role in making phenomena understood, encouraging responsible thinking and applies a scientific-professional viewpoint in his/her decisions and actions.
- Makes individual decisions based on professional opinion, and prioritizes delivering opinion and acting based on research.
- Is a reliable professional partner in various professional collaborations, can both lead and follow effectively in cooperation.

Reading list

Required reading:

Schunk, D. (2014). *Learning Theories: An Educational Perspective (6th edition)*. Harlow, UK.: Pearson.

Spector, M. (2016). *Foundations of Educational Technology: Integrative Approaches and Interdisciplinary Perspectives*. New York, NY: Routledge.