EDUM-ET-103 Instructional Design and Development I (MA)

Aim of training

Aim of the study program

This course was designed to provide students with the foundations for enhanced learning experiences through the meaningful integration of technology. The course addresses the fundamentals of educational technology including the integration of instructional design, media, computers and related technologies within various educational contexts. Students will get familiarized with a wide range of educational technologies, will explore and evaluate how, when, and why technology should be infused into education, will learn how to utilize various technologies as powerful teaching and planning tools and will design meaningful learning experiences meeting learners' diverse needs. The class meets in a technology rich classroom environment to maximize opportunities for hands-on learning.

Expected learning outcomes and related competencies

Knowledge:

On successful completion of this course, students will:

- demonstrate facility in the use of various educational technologies
- design instructional units that demonstrate age-appropriate applications of various educational technologies

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

- 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. Understands the role of the various learning spaces and environments in lifelong learning and learning in all areas of life and culture.

Skills:

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

- locate information and resources on educational technology
- evaluate instructional uses of software
- describe how characteristics of particular technologies can be exploited for maximum educational benefit based on learners' needs.

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.

Attitude:

Students will develop:

- critical, creative and reflective attitudes towards educational technology

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.

Main topics

Main contents

1. Technology and teaching: Technology standards for 21st century learning, Challenges and opportunities for teachers

2. Technology and learning: Focus on the 21st century learner

3. Planning for technology integration: Designing quality instruction, From design to planning, Planning technology infusion, Instructional planning: challenges and opportunities for teachers

4. Technologies in the digital classroom

5. Applications for teaching and learning: Software in the Digital Classroom, Administrative applications for teacher tasks, Academic software, Online tools

6. Technology for diverse learners: Technology solutions for learners with special needs, Technology supports for special needs in content areas, Assistive technologies, Universal design and technology solutions for all learners
7. The Web in the digital classroom: The Internet and the evolving web, Web tools and resources for teaching and learning, Digital Citizenship, schools, and the Web
8. Technology for digital learning and delivery: Instructional delivery systems, Digital learning and delivery: Implementation Issues, Technologies for digital learning, Delivering digital learning: opportunities and challenges

Planned teaching and learning activities

The course is designed to encourage learning through authentic tasks and through a combination of offline and online activities: lecture, model lessons, project-based learning, writing-based assignments, social networking, technology portfolio, textbook readings, Canvas-facilitated learning.

Evaluation

Requirements, type and aspects of evaluation:

Each of the following assignments will be given a letter grade and weighted as follows:

Leading a classroom discussion based on the weekly reading assignments – (20%)
Developing a digital portfolio showcasing the use of 5 digital tools for teaching and learning (50%)
Developing a technology-integrated unit plan (30%)

Course grades:

5 (100-90%),
4 (90-80%),
3 (80-70%),
2 (70-60%),
1 (below 60%)

Reading

Required reading:

Howland, J., Jonassen, D., & Marra, R. (2012). *Meaningful learning with technology* (4th ed.). Upper Saddle River, NJ: Pearson.
Lever-Duffy, J., & McDonald, J. B. (2018). *Teaching and learning with technology* (6th ed.). Boston, MA: Pearson Education.